

TUESDAY, 10 JANUARY, 1932

[The Commission met at the Court House, Wellington.]

Present:—

C. E. B. MURRAY, Esq., D.C.J. (PRESIDENT)

D. A. W. ROBERTSON, Esq., Commissioner | D. H. HURIE, Esq., Commissioner

Mr. Percy Smith, Barrister-at-Law, instructed by Mr. Wood, Crown Solicitor's Office, appeared on behalf of the Crown.

Mr. A. A. Ashmore, Chief Inspector of Constabulary, assisted Mr. Percy Smith.

Mr. A. A. Lonsdale, Solicitor, appeared on behalf of—

- (a) the representatives of deceased miners, shockers, drs., & others of the explosion;
- (b) the employees of the Mount Kennedy Lignite (miners, shockers, drs.), and
- (c) the Blakely Colliery Employees Association (the Southern Miners' Union).

Mr. C. G. Webb, Barrister-at-Law, instructed by Mr. F. Christie, appeared on behalf of the Mount Kennedy Coal and Oil Company (Proprietors of Mount Kennedy Mine).

(Mr. J. Harlow, Secretary to the Commission, was present to take shorthand notes of the evidence and proceedings.)

8818 (His Honor stated that the Secretary had drawn his attention to the fact that in the evidence taken made in the mine were referred to by names which might lead to confusion in afterwards identifying them as the map. For instance, the road marked on the map as 24th Right road was sometimes referred to in the evidence as No. 5 Right road, whereas the map shows that the No. 5 Right road was in another position at the mine at a distance from the 24th Right road. His Honor asked Counsel to bear in mind the fact that all the roads leading out from the No. 1 Right shaft road were called 24th Right road. 24th Right road, 24th Right road, 24th Right road, 24th Right road, and so on, whereas those starting out from the main tunnel were designated as No. 2 Right, No. 3 Right, No. 4 Right, No. 5 Right, No. 6 Right, &c. If the case before us is simple, His Honor pointed out, confusion would be avoided.)

Mr. JOHN KELLY also further examined as under:—

Cross-examination by Mr. Webb:—

8819 Q You said last Thursday that you had been in the Police Force? A Yes.

8820 Q When did you leave? A I could not tell you.

8821 Q How long ago? Was it in 1929? A It might have been 1929? Oh, it is longer back than that, I think.

8822 Q Was it not July, 1929? A I could not tell you the date or the month.

8823 Q When did you come to leave? A I left.

8824 Q I know you left. Just answer my questions. I ask you how? A I do not see what that has got to do with this.

8825 Q You do not? A No.

8826 Q Do you decline to answer? A I do not say that. I know how I left all right.

8827 Q My friend, I will take your Honor's ruling on that. I would ask whether it is material that a witness should be asked why he left the Police Force.

8828 His Honor: If it comes to a question of credibility of course, a witness may be examined on his former history. It is generally better that a witness should answer. If a witness declines to answer, there are some cases in which it would be quite justifiable for counsel to press the question, and other cases in which counsel, using a fair discretion, would not do so. It depends very much on the history of the matter as known to counsel.

8829 Witness: It was nothing that I could be ashamed of that I left for.

8830 A: If you say that I will ask you a question? A If you put the question like that, I will say "No."

8831 Q Were you discharged? A Yes: that is right—yes.

8832 Q Were you discharged for bad conduct? A What you like.

8833 Q Yes or no? A That is fully brought out dealing the name of a certain party.

8834 Q Were you discharged for bad conduct? A You can call it what you like. It may be it was for a breach of the rules.

8835 Q Were you discharged for criminal conduct with a woman whilst on duty? Was that the charge? A Alight.

8836 Q What is the alleged ground of dismissal? A That is it.

8837 Q Now, was it not in July, 1929? A Yes, I was not prepared to tell the month. If it was, I do not see much difference. It may have been. I do not see that I have got anything to do with this that these things should be asked up here.

8838 Q Whilst you were in the Force, a couple of years before that, were not you fined for assault? A I do not say why these things should be brought up to me, Your Honor, here. If I did these things, and remained in the Force for two years afterwards it could not be so bad.

8839 His Honor: Remotely in the evidence for two years after a fine for assault almost speaks for itself, as the witness says. Assuming for the sake of argument that he was fined for assault, and was kept on in the Force for a couple of years after that, then that state of the evidence is pretty well done away with the discrediting effect of the fine. A day for assault is a matter immaterial to the question of the honesty of the witness. If he likes to explain it he can, but I do not think it ought to be pressed further.

8840 Mr. Webb: Q Is that the only case of conviction for assault against you? A I am not going to tell you anything more. That is all. It has nothing to do with the case at all. My antecedents have nothing to do with the case.

- 3212 Q Did you receive a sentence of six months' imprisonment? A I am not going to answer you any more.
- 3213 Q Did you receive a sentence of six months' imprisonment in 1925? A I am not going to answer any more questions to you.
- 3214 Q Did you agree that sentence? A I am not going to answer any questions to you at all. I know what you are trying to do. You are talking about a sentence to which I will explain is up on my mind.
- 3215 A Yes, please. If you wish to explain, you may explain it.
- 3216 A Witness, I will say this and no more: I was up most for answering a man on a boat, and it was him so much of my mind, and I got out of it.
- 3217 A Yes, that's it. That is not what I am referring to. Will you answer me this?—A. No, I will not.
- 3218 Q Answer me this. Did not the occurrence of sending a man on a boat take place whilst you were in the Force? A I will not say.
- 3219 Q Will you say it did not? A I will not say.
- 3220 Q Now, I ask you whether you actually have not served a sentence of six months? A I am not going to answer any more questions with respect to my antecedents. I have been here seven years, not I think they speak for themselves.
- 3221 Q Now, I ask whether in 1925 you did not actually serve an sentence for six months for assault? A I am not going to answer any questions. I do not think it is an honorable question to put to a man. I think it is a scandalous thing to ask questions of a man like this, when he has lived an honorable life before with no one to put at the finger of more at him.

Cross-examination by Mr. Bruce South.—

- 3222 Q Now in describing the explosion in the Mount Kemble Mine, you told us that you had great experience in gas? A In gas. I have had good experience among gases.
- 3223 Q Do you mean in mines? A No, not in mines, but at other works that I have worked at, as furnaces, and all those different kinds of gases and flames.
- 3224 Q What sort of furnaces? A Smelting furnaces particularly—flues in all.
- 3225 Q What is your experience of gas in connection with smelting furnaces? A Well, of course, in smelting all those furnaces the gas is very bad. Those are times when you go on for an eight-hour shift, and in reality you only do ten minutes' work.
- 3226 Q In what other form have you had experience of gases? A Outside the pit, now.
- 3227 Q And I understood you have worked in two mines only—Kiers and Kembla? A Yes, that is all. I have been down a good many mines, but I have never laboured in them.
- 3228 Q How many times do you say you engaged the deputy with the presence of gas in the Mount Kembla Mine? A Well, only on two particular occasions.
- 3229 Q One occasion—and that was Evans? A That is the time I am speaking of when my wife and the three of us were there.
- 3230 Q Who were the three? A Charles Allen, Percy Evans, and myself.
- 3231 Q Just your wife and yourself and Evans? A Yes.
- 3232 Q I think you said you do not know where your wife is? A I believe he is working in the Sheffield Municipal Colliery, near Metherall, or I was told he was there. It is a new colliery.
- 3233 Q As to the Mount Kiers Mine, I think you said the ventilation was bad? A No, I did not say that. I do not think I was asked any questions about that.
- 3234 Q What was the ventilation like? A I have not been working there long. I have only worked in the two places in the mine.
- 3235 Q You said it was pretty bad there, did you not? A No, I do not think I was asked any questions on the ventilation of Mount Kiers Mine. I said that the ventilation in one particular place I was working in in Mount Kembla was bad.
- 3236 Q What was the ventilation like in Kiers? A Some parts of it are pretty warm.
- 3237 Q What parts were they? A When I was working there first, down in the old shaft, it was very hot there. I was working on night work.
- 3238 Q Did you find gas in Kiers? A Well, yes. (Interupted).
- 3239 Q Did you complain that you had seen gas in Kiers? A No, I did not complain.
- 3240 Q Did not you state on one occasion that you had found gas in Kiers? A Outside the Court, or on the Court?
- 3241 Q Outside the Court,—and did you not state that it had been lighted? A Yes I have stated that.
- 3242 Q Who was your wife on that occasion? A I was working with Billy Preece. I am working with him still. That is the last word.
- 3243 Q I am speaking now, of Kiers? A Yes.
- 3244 Q Did he light the gas? A No. We were working next to Paddy and Alfred Gleeson, two brothers.
- 3245 A In the next head? A Yes. They were just breaking away a head at this particular time. They had been further up our head after being a shift, and evidently had their lunch. Well, Paddy called out to me, and said, "Come up here, Jack. I said, "What is the matter?" He said, "Come here." So they go in I went to his place. He said, "Come in here—what is to go into his head. I said, "What is the matter?" He said, "Come in here."
- 3246 Q Never mind what was said—what did you see? A I went up to the face of his head, and he took the lamp and held it up to the face.
- 3247 Q Did it light the gas? A Yes.
- 3248 Q Through the lamp? A With the naked light.
- 3249 Q Was that a jet coming out of the wall—the rib? A No, it was up near the roof.
- 3250 Q Was it continuous? A It was a flame. He took his hat off, and behind the flame out with his hat.
- 3251 Q It was coming out—[Interupted]? A I could not say where it came from. It was there.
- 3252 Q Did you report that to anybody? A No, I did not.
- 3253 Q That is three of those three men, your mate or the Gleesons, report it? A Oh, they reported it.
- 3254 Q To your knowledge? A Yes.
- 3255 Q To whom? A Alvin McDonald and Deputy John.

1925. Q Who is Altek McDonald? A A deputy.
1926. Q He reported it to two deputies? A Well, I think John's position is underground manager.
1927. Q Are there two John's or only one? A Only one.
1928. Q Was it reported to both those men in your presence? A I was there, close by.
1929. Q Were they together—John and McDonald? A No. I think McDonald came in first, and John came in a few minutes afterwards; but there was the first of them there at the time.
1930. Q I understood that McDonald was told in your presence, and John was told a year previous—were those there men present? A I heard the report being made to McDonald, but I did not hear it being made to John, although they both went into the plate afterwards. Of course, John came in a few minutes after McDonald.
1931. Q You heard it reported to McDonald? A Yes.
1932. Q Do you remember what was said to McDonald? A They told him that the gas was there, and that they had it.
1933. Q Do you know whether McDonald said anything? A No, I could not say anything that McDonald said. I did not hear what he said.
1934. Q You did not hear them say anything to John? A No.
1935. Q Where were the Glascoes? A I expect they are working at Kern today.
1936. A You are working in Kern? A Yes.
1937. Q And you believe they are working there still? A Yes, they are working there still, right enough.
1938. Q When was that? A Last year.
1939. Q About what quarter? A It is about four weeks ago, perhaps less.
1940. Q Did you see Mr. Watson, the Inspector, when he went over the Kern Mine? A I have seen him there several times.
1941. Q Since that time when you saw gas? A I will not be very particular whether it is before or now. Yes, I have seen him there before and now.
1942. Q But since? A Yes, since.
1943. Q Have you any knowledge as to whether Mr. Watson found gas there? A Yes.
1944. Q Personal knowledge? A Yes.
1945. Q Where did he find it is your presence? A He found it in one hole, and found it in the heading the Glascoes were doing at.
1946. Q Also in your presence? A It was not in Glasco's place.
1947. Q I want to distinguish what you know through being told, and what you know of your own observation? A In my own place he came in and tested, and he said "It is here."
1948. Q Is that very same place? A In the same hole.
1949. Q How often before that occasion, when you have mentioned did you find gas in Mount Keith mine? A When the Glascoes started that cut through from my hole into their head up one (interrupted).
1950. Q Part of all I ask you have many times can you remember gas being found in Mount Keith before that occasion? A On my own personal knowledge.
1951. Q Yes. A Once.
1952. Q How long was that ago? A It was two months ago.
1953. Q You never saw it before that in the mine? A No.
1954. Q Are you sure? A Yes.
1955. Q Think now. How long is it since you went into Kern? A About six months.
1956. Q You did not go there until after the Mount Keith disaster? A Not until about a week after.
1957. Q On this particular occasion, about two months ago, where was the gas that you found? A The Glascoes had started a cut-through a few yards from where I was working.
1958. Q The same part of the mine that you were in a month ago? A Yes. They had started this cut-through to go through from my hole into the heading they had driven. They had a shot hole and stemmed, and they called out "Gas", and we had to go away a distance from the shot; and after the report there was a flare that burned about ten or fifteen seconds.
1959. Q That is when you were returning to the face? A We did not return.
1960. Q Could you not? A Yes, we could see it out from the cut-through; out into my hole.
1961. Q Who were looking at that that time? A Four of us—Glasco, Billy Foster, and myself.
1962. Q Was that reported to anybody? A To my knowledge I do not think so.
1963. Q Do you know why? A Well, there are a great many things that are not reported in California, of course.
1964. Q I know, but did not you consider that as indicating a considerable danger in working in that part of the mine? A Oh, I consider there is a danger in working there, and making—(interrupted).
1965. Q But did not you think? A It is far more with them to report it than with me.
1966. Q It was in their head, not yours? A Yes.
1967. Q Do you know why they did not report it? A No.
1968. Q Had they been in the mine longer than you? A They had been in Kern a good while.
1969. Q Did they treat it as a novelty, did they say anything about seeing gas in Kern before? A They reported it as quite a new thing there, or did they seem concerned in it? A I think Paddy Glasco and it was the second time it had happened there.
1970. Q You say the Glascoes are there still? A They are there still.
1971. Q Can you hear any sign at the extent of the gas? How long the flame was? A The flame ran from the face into the hole. Of course they were not very far from the hole.
1972. Q How far is that? A About 10 or 12 feet.
1973. Q Did it fill the hole? A Oh, yes, you could see where it had been.
1974. Q It filled the hole? A Yes, pretty well. You could see the flame out from the cut-through, in the hole.
1975. Q Looking at the hole when the shot was fired you could see the whole place filled with flame? A You could see the flame.
1976. Q You said that Wiggins was nearly blown up—speaking of another experience of gas in Kanabla Mine? A He came rushing into my hole—(interrupted).
1977. Q Was that in Mount Kanabla? A Yes.

2383. Q How long ago? You said five or six months before the disaster? A Yes.
2384. Q Was anybody told of that in your presence? A Well, no. I fancy I was working by myself that day.
2385. Q You cannot say whether anybody was told of that, or whether it was brought in any way to the knowledge of any official at the mine? A No, not to the officials; I could not say that.
2386. Q Where is Wagon? A He may be working at Coalville, down there. I am not sure. I believe he is.
2387. Q What led you to the conclusion that the horses had been blown off these horses? A I have plenty well that there was nobody on them taking the horses off.
2388. Q I want to know why you thought that? A That is the conclusion I arrived at; and others with me.
2389. Q There was no harness on the horse? A There was nothing left on it.
2390. Q The horse was down? A Down on its side.
2391. Q Did the horse appear to be lying when it had stood? A Yes.
2392. Q Would it be like a horse fallen with his head down? A He may not have.
2393. Q Did not he appear to have fallen where he had stood? A Yes, he did.
2394. Q If he had fallen where he had stood would not he have fallen with the harness on him before the actual fall came? A Some force, coming at a terrific rate, would take the harness off him before he had time to fall down.
2395. Q Was he against the rib? A No, between the ribs, lying on his side.
2396. Q Mr. Adams, Q Did you see where the harness was? A No, Your Honor.
2397. Q Mr. Adams, Q Did you see any part of the harness was left underneath his body, as if the neck had been blown off? A The far as I could see there was no harness visible.
2398. Q No handle? A No.
2399. Q Was any part of the horse itself blown off? A Not that I know of.
2400. Q Any handle, or even, or anything? A No.
2401. Q He just looked as if he had never had the harness on? A That is right.
2402. Q That by himself—was he not blown? A I could not say. I would not say.
2403. Q You say standing horse had the harness on—was he near the side that had his harness off? A Yes, not near, quite away, but in a different heading just round a corner.
2404. Q That is to say, one might have been exposed to a force and the other not? A Yes.
2405. Q Was the harness of the way around the corner complete? A It appeared to be.
2406. Q Did you take a sufficiently careful note of the things then—I do not say on paper, but in your mind,—to say whether there were any more evidences of force in the place where the horse without the harness was than on the other place where the horse was which had his harness on? A No, I could not say.
2407. Q Mr. Adams, Q I suppose the harness would be only collar and hames? A Collar and hames, and reins and traces. I think they have a knowledge, I am not sure.
2408. Q But have they knowledge? A Yes, I think so.
2409. Q Mr. Adams, Q Just show me on that map where the horse was with the harness blown off, and where the horse was with the harness remaining intact? A We went in from the daylight heading over the mountain. I believe we were down the No. 4 Right eye road in the shaft section.
2410. Q I understood you to say that the horse that had no harness on him was in No. 4 Right, off the shaft winding road? A Yes.
2411. Q Mr. Robertson, Q Parson one, he is all wrong. It was in Parson's Flat.
2412. Q Witness, I see it was in Parson's Flat. Mr. Robertson was there at the time with me, and he knows the place. He was present at the time. That part of the pit is now in me.
2413. Q Mr. Adams, Q Have you a careful note of where they were, Mr. Robertson?
2414. Q Mr. Robertson, I made a note.
2415. Q Mr. Adams, Q Then I do not think I need trouble about it.
2416. Q You must find a month out of this question—did it in a shaft of the face—there was always smoke about even in the morning? A You are asking of that heading. Yes, I said that.
2417. Q To whom did you complain of that? A To Deputy Stacey; that is all.
2418. Q Where then was? A Yes, a few times, several times.
2419. Q And you remember when you say that, for a month out of the quarter, there was always smoke about even in the morning when you went there? A Yes. I would not say it was there every morning, you know, but for two or three weeks that place was very bad.
2420. Q What part of the way was that? A It was a heading—a head off a heading that ran from the shaft down towards Parson's Flat.
2421. Q You cannot accurately place it? A It ran from down near the Tommy-Woods down towards Parson's Flat.
2422. Q Can you place it on the map? A I cannot place it on that map. I was working on No. 44 at that time.
2423. Q I understood you to direct to Mr. Evans that "Evans was a good deputy, he would not insist on the shaft survey, out of the Robertson's and they were not necessary." A No, he was not with me.
2424. Q Will you tell me of any disagreement that Mr. Evans did not carry out, or that he did not insist on your carrying out? A Well, for instance, I might be holding a shaft without a spring, and he would come on and say, "Oh, it is all right."
2425. Q Can you remember any occasion? A That has happened several times. I cannot say now that I can remember on particular occasions when he came in, but it has happened.
2426. Q Do you know that he stated that you had no spring? A He could not be off it. He could not help making it.
2427. Q You cannot satisfy me that he knew that you had no spring, can you? You say, "He could not help making it." A No, he could not help making it.
2428. Q Was you (plunged) along, no—no and he said, "Oh, that does not matter?" A Yes.
2429. Q How was his attention drawn to the absence of the spring on that occasion? A I was holding a shaft, and it was a very level place, and the coal was encountered on the roof on that portion of the pit—[Interposed].
2430. Q How long ago was this? A It was the week before the disaster.

1933 Q On my? A He passed some remarks about the pit. I said, "there is not much fear of it falling. You must blow it off." He just passed a casual remark like that, and would then go away again.
1934 Q You are to be well what? A He passed some remarks about my not having a apron, and I said, "You could not blow it off; there is no fear of it falling."

1935 Q Is that the only occasion when he spoke at all? A That is the only occasion I can speak of.

1936 Q You say you have since done it to his knowledge? A Every man does it.

1937 Q You personally have often done that to his knowledge? A Yes.

1938 Q And he has not interfered with it, although he has seen it? A Yes.

1939 Q That is to say, although he has been there, and had an opportunity of seeing it? A Yes. It was not necessary.

1940 Q What was the height of the man at that point? A It was under 5 feet.

1941 Q Well you tell me any other regulation which Evans allowed you to ignore? A No.

1942 Q You and he was a good deputy, will he would not touch on the strictest reserve out of the neighborhood when they were not necessary,—may I take it that that is the only one? A In Kamla you are supposed to keep your back within 6 feet of the face. Well, if the road is a good road you may keep your back 12 feet or 14 feet from the face. Of course it is breaking the law all right.

1943 Q Have you ever had your back at more than 5 feet from the face when Evans has asked you? A Yes.

1944 Q Has any conversation ever taken place? A Sometimes he might catch you up for a prop, and say, "Put a prop there," and put a prop.

1945 Q Where does that regulation come in about getting props 5 feet from the face? A I could not say. I believe it is in the First Mines Act. I am not sure.

1946 Q You do not know that? A No. It is mentioned in all mines.

1947 Q Mr. Wink [Q] What did Evans say then? A Oh, it would not be an excessive thing for him to put a prop up.

1948 Q Mr. Evans said, [Q] You say he would sometimes come in? A Yes, and check you up.

1949 Q What would he check up? A He would put a stick on the roof there.

1950 Q To show where you were to put a prop? A Yes.

1951 Q Then he did direct you sometimes to put a prop up? A Yes.

1952 Q Mr. Evans said, [Q] What you mean is that he would come in and see when you had done, and see what ought to be done,—and he would direct you to do it? A Yes.

1953 Q Mr. Evans said, [Q] Did not you say that Evans did not make a proper examination of the face each time? A Sometimes he would, and sometimes he would not.

1954 Q That is before the men went to work? A I do not say that. It is what we are at work. Of course the night deputy used to make that examination before we went to work.

1955 Q What do you say he did not do that he ought to have done? A According to the strict regulations? A Evans was he would go past your head and look out, and would not come in to the place.

1956 Q Did you ever complain of that? A No.

1957 Q Is that what you mean when you say that he would sometimes come in without making a proper examination? A That is what I mean.

1958 Q That sometimes, instead of coming into your head, he would simply walk by and call out? A He would not come up to the face where you were working.

1959 Q Call out what? A "Are you all right?" "How are you going on?"

1960 Q And you would reply "All right?" A "I'm out?" Yes.

1961 Q What, in your opinion, ought you to have done? A In my opinion then I was quite satisfied with it.

1962 Q What did you consider was his duty then that you say he did not do? A I know it was his duty. I was breaking the rules myself, and he was doing the same.

1963 Q I understood that to take a notice to, one of three things yourself, you think it is all right,—but what was his duty, in your opinion, when you think he did not fulfil? A Certainly his duty was to come in and inspect the face of your working place.

1964 Q Every time he passed? A Once during working time at all events.

1965 Q That you say, he did not do? A No.

1966 Q Properly he would come in and go out without having inspected your face at all? A Yes.

1967 Q That is Evans? A Evans.

1968 Q Did not other deputy do that? A No. Nelson was more strict than Evans was. The other deputy was more strict than Evans was.

1969 Q And how many times would it occur that the deputy would walk by instead of coming in—to the face of Evans? A It may have happened less as to other men.

1970 Q Is he long? A During all my experience there.

1971 Q And how long? A Pretty well two years.

1972 Q On all other occasions he came in? A Oh yes, he would come in and sometimes he would stay there a few minutes to have a conversation with us, and sometimes just come in and turn round again and go out.

1973 Q But you, on Thursday, at the time at which Evans came to your place, when that engine room was going on, and when he said it was gas? A I did at the time. I think I said it was about four or five minutes before.

1974 Q It was he down on the notes of you here, it is all right. When Evans walked by on these three days occasion, was it at the beginning of the shift, or the middle, or the end? A At different times. Sometimes he would come round to your place at 16 o'clock on the morning; other times at 12, or say here.

1975 Q But when he passed? A No. I could not fix the time when he passed.

1976 Q Was the part of the shift? A No, I could not.

Re-examination by Mr. Wright.—

1977 Q After the gas was reported by the Glenora's or Kears do you know whether any precautions were taken regarding that place? A No, there were no other alterations.

1978 Q Are you still working on Kears with the naked light? A Yes.

Re-examination

Examination by Mr. Robertson:—

- 2425 Q You made some remark looking, it appeared to me, to reflect on the management for rushing in ships to pillars? A That is the time we had the meeting—you, I did, Mr. Robertson.
- 2426 Q In what way did that show any bad management? A Oh, I did not reflect on the management in connection with that part. We were working in the wind at that time—in the bad place that I speak of—and we were not getting away from ships there. We were getting about eight or nine a day, that is all, but in those four places in particular they were getting as high as thirty ships a day, and the witness had a meeting, and a deputation was sent to Mr. Rogers in connection with the matter, and I was one of the deputation, and I had the sheet from the clerk—weighmen for the month previously showing the number of ships that each pair of men had throughout the job. Some of them would be getting, say, for the fortnight's pay, 60 tons, others had 120 and 160, and, I think, pretty well up to 200 tons. Well, Mr. Rogers—when I said those out to him—and "Sacks, I had no idea that things were like this, and I thought they were more equally distributed than that," but those four places there are special places," I said, "We will give you that in, it does not matter if you give them fifty a day, those four, if you call them special places, but we want to have them more equally distributed to the other places." He said, "All I can do is this. I will promise you that you will get your share of ships." We went back, and the next day there was a difference in the ships.
- 2430 Q What was your case is not quite the same as you said previously. What you said previously seemed to me to be an impression on my mind that there was something wrong, that it was being worked too quickly? A Yes.
- 2431 Q As a matter of fact—you have not had much experience in working—to work and pillars quickly in the best possible way? A Yes; but those four places were worked out with extra quickness.
- 2432 Mr. Bruce Smith: I think he suggested that Mr. Rogers had an object in working that out quickly, because it was rapid progress.
- 2433 Witness: Yes; that is the opinion of the witness generally as to it.
- 2434 Mr. Robertson: I understood him to say that the practice of working pillars out quickly was dangerous.
- 2435 Mr. Bruce Smith: No; he suggested that those were worked out quickly because they were dangerous.
- 2436 Witness: That is what I said.
- 2437 Mr. Robertson: Q As a matter of fact, pillars are always worked out quickly? A Certainly.
- 2438 Q You will admit, I presume, that it is considerably more difficult to rattle pillars than bords? A Yes; it would be.

Examination by Mr. Ritchie:—

- 2439 Q I think you told us about Mr. Erwin passing your place and asking an examination at all—was Mr. Erwin always the day deputy while you were there in that section of the mine? A In the shaft section always.
- 2440 Q He was always the day deputy in the shaft section while you were there? A Yes, Mr. Erwin was the deputy for No. 4.
- 2441 Q How did he rate in your place when he came in? A He would come into the shaft sometimes; and look round and take back again.
- 2442 Q Did he ever ask any questions about mining gas; or anything of that kind? A No, never.
- 2443 Q Did he make any attempt to interfere for gas himself any part of the working place? A No, never.
- 2444 Q On no occasion? A On no occasion.
- 2445 Q And on those occasions when Mr. Erwin did not come into your bord, did any other deputy come into your bord during your shift that day or on those dates? A No.
- 2446 Q In other words, you had no examination of your working place that day or on those dates? A That is right.
- 2447 Q Did the under-manager frequently call into your place? A The under-manager? Yes; frequently.
- 2448 Q After you had that you did he ever make any inquiries about finding gas? A No.
- 2449 Q About how often did the under-manager call round? A Mr. Leitch used to come round, and the other men, too, (Nelson), when he was promoted to become under-manager, we used to see them pretty often—perhaps once or twice a week.
- 2450 Q How often did you see the manager in your place? A I never saw him in my place.
- 2451 Q Did you ever see the Government Inspector? A In June.
- 2452 Q In Mount Kemble? A No, only at the time of the accident. It is writing time I am speaking of.
- 2453 Mr. Bruce Smith: Q Did you ever see the Government Inspector in the mine at all in Mount Kemble? A Not in Mount Kemble, mind, at the time of the explosion, I saw Mr. Atkinson.
- (Witness left.)

Mr. WILLIAM MARSHALL was sworn, and examined as under:—

Examination-in-chief by Mr. Brynht:—

- 2454 Q What is your name? A William Marshall.
- 2455 Q What are you? A A miner.
- 2456 Q Where are you employed? A In Old Ball's.
- 2457 Q What mining experience have you had? A Twenty years.
- 2458 Q Where? A In different parts of the Home country.
- 2459 Q Give me the names of the collieries? A In the Home country I will give you Logan's, Dalziel, Camp Creek, Mendon, Mt. Warfield No. 2 and Mayfield No. 2. In New Zealand—(Telegraphed).
- 2460 Q What collieries there? A On Ora, Shag Point, and Ball's in the old mine.
- 2461 Q What Ball's? A Old Ball's.
- 2462 Q How long have you been employed at Old Ball's? A A little over eleven years—about twelve, as near as possible.

5455. Q. And during the whole of that time have you been eating and? A. Well, I have been eating and this time I have been employed at lunch. I ought to be out on some work, mind.

5456. Q. And you are a member of the Delegates Board of the Broward Mosquito Union? A. Yes, at present.

5457. Q. Tell me, did you go to Kew-Bla the day of the disaster? A. Not on the day of the disaster.

5458. Q. Did you go into the Kew-Bla house after the disaster? A. Yes.

5459. Q. When? A. On Saturday; was No. 1.

5460. Q. Were you with the party of suspicious looking by Mr. Barker? A. No, I was not with that party.

5461. Q. Was it the Saturday immediately following the disaster? A. Yes.

5462. Q. Who went with you? A. The late Mr. Coker was the leader of the party.

5463. Q. And what was the party? An exploring one? A. No, a party to bring out the dead bodies which were in No. 1.

5464. Q. Can you show on a plan any of the places on No. 1 where you went? A. I do not know—unless I saw the plan very clearly.

5465. Q. This is No. 1. Right, all the way up there? A. Where is the daylight tunnel, coming in?

5466. Q. This is it? A. We took on by the daylight.

5467. Q. Mr. Barker? Q. You went on by the daylight heading? A. Yes, we entered by the daylight.

5468. Q. Mr. Zepher? Q. This is the old right rope road here? A. We came down the rope road after we came on the daylight, and then we had to leave that rope road on account of a heavy fall, and got down the back heading on to Powell's Flat.

5469. Q. Did you observe anywhere any signs of flame having passed? A. Down below there were signs.

5470. Q. What do you mean by down below? A. Down below, where there were split props. There have always got a certain amount of—well, they are not sharp but flat floors, starting where they were been split.

5471. Q. Mr. Webb? Q. Explained? A. No; but later than explained. What I mean is that there are splinters with a fine burr-like feel to them, and fine passing along had scraped that off.

5472. Q. Mr. Zepher? Q. Where was it you noticed the prop-splinters like that? A. Down about where the fall was, and even the other side of what I believe was a trap door, which was all smashed, where we brought the dead bodies through.

5473. Q. Can you say who was found near where these props were found? A. The last two that were brought out, but not out of Powell's Flat. They were brought out of somewhere about the back heading. I could not really describe that.

5474. Q. Who were they? A. Morris and one.

5475. Q. Did you see the place where Morris and one were brought from? A. Not exactly, because our party went to Powell's Flat and brought as many bodies from there, and then we came back, and when we came back a gentleman—I cannot say exactly who the gentleman was—told us that there were some other dead bodies and asked would Mr. Coker want most of his party to bring them. He had been at this previously to us. We went and brought these two other bodies out and took them right outside, and that thing I did not go to see them in the dust.

5476. Q. Were these two bodies the bodies of Morris and his son? A. No I was told by the people who knew them.

5477. Q. Did you observe whether any of their clothing was burnt? A. Yes, I did.

5478. Q. What of them? A. Both. The hair of both was completely burnt down. When you touched their arms or their heads to lift them or move them about—this was out in daylight, away from the pit altogether—everything you touched seemed to come away, and the hair—you would not know there had been hair there where you ran your hand over, and that you would get what you might call scales.

5479. Q. Do you speak of the hair of these heads? A. Yes, that is what I speak of.

5480. Q. Did Morris, senior, have a beard? A. Well, now, I could not exactly say. That I would not like to swear to.

5481. Q. Leaving their bodies themselves, what about their clothing? A. Their clothing was seemed to be singed. The young man's arms were here, in where the elbow, but the older gentleman had got his arm on. It seemed as if he was about to leave the mine.

5482. Q. Drinking now with the older man first—did he appear to be completely dressed to go out? A. Yes.

5483. Q. What articles of his clothing were burnt? A. I should say that everything on him was perfectly singed. That is giving my opinion.

5484. Q. Did you notice his boots? A. Yes, they were seemed to be singed. I took more notice of the heat of anything else.

5485. Q. His boots seemed to be what? A. To be what I would call scuffed.

5486. Q. Did he have a cap on? A. Yes—he had his cap on. I could not say whether it was on, mind, when the dead body was lifted, or not, but the cap was there on him. The young man had none on.

5487. Q. Keep to the old man first. Did you see whether the old man's boots were anywhere near where he was found? A. I cannot say about that.

5488. Q. Is there anything else you want to tell us about the body of the old man—where, its condition? A. No. I cannot tell you more than that, by reasoning, possibly when we were to the daylight, I could see it had been burnt. It had been in the dust, in my opinion.

5489. Q. In addition to being burnt, was any of the clothes here? A. Not that I am aware of. They might have been here, and I would not take any notice of that, because many a man will wear a worn coat to the pit.

5490. Q. Tell us now what clothing the younger man had on him? A. He was in trousers and flannel—a flannel shirt; and when he was lifted I believe he had his cap in his hand, and I know there is a pipe which another mate of mine found. It had picked up and put on the stretcher with him. The pipe was at the back of the work when he was picked up.

5491. Q. Mr. Webb? Q. What do you mean by the work? A. He had his cap like that (mimicking). He was lying on his face; he had his head at the back of his neck with the cap, like as if he was shielding himself from something.

5492. Q. Mr. Zepher? Q. Do you know if he was lying on his face when he was found? A. Yes, because we had to turn him over to put him on the stretcher.

Witness—W. Marshall, 20 January, 1935.

2506 Q Do you know whether he was facing outside or inside? A I am not acquainted with the sides, and cannot say.

2507 Q Do you know whether he was facing towards the east or facing out? A I could not say, because I was not at the face of the post. I would not like to say what I do not know.

2508 Q Did you usually help to lift him and turn him over? A No, I did not. I think Symes and another man did.

2509 Q How far were you away when he was turned over? A It may be a few yards.

2510 Q Can you tell me whether he was facing the way you came up? A No, I cannot. A good line of us turned away because there was too great a stench.

2511 Q In what way were his clothes altered? A They were about the same as the old man's. I should say, apparently, only that the flannel shirt, of course, is not as bulky to catch fire. You could not see as much with the flannel shirt as you could with my other garment, because it will not catch fire so easily as quick.

2512 Q What about his boots? A His boots were about the same as the old man's. They looked as if they had been scuffed.

2513 Q Then in addition to the burning or scorching, did any injuries appear to them otherwise? A No, I saw no other injuries.

2514 Q No, no marks broken, or anything like that? A I could not say. We did not examine for that. 2515 Q What was the condition of the place near where they were found? Was there any broken timber, or anything like that lying about? A Well, of course, there may be broken timber and the like of that—I would not like to say that there was not down on timber, because, not really leaving the man, to go into that would be a serious question.

2516 Q You have not told us yet where it was exactly that three bodies were found? A I could not really, because, not knowing the area, it would be impossible. I might say it was in a certain place. But, according to accounts that I hear of the same from other people that know the area, it was about a half heading in No. 1. It was my first time in that mine.

2517 Q You were told it was the back heading of No. 1. Did they tell you how far you were from the starting face? A No, I do not know.

2518 Q How far were the bodies from the place where you saw the people engaged? A They would have been good.

2519 Q What is a good bit? A Well, you see, the one was in my direction and the other in the other, about where the big fall occurred. Well, of course, I could not tell how it would be. One road you go this way, and another that, and it is hard for me to tell by just simply walking into the mine what the differences would really be.

2520 Q Perhaps you could tell me this. Besides their bodies, did you notice anything else burnt about where they were found—anything, you like, the ribs, props, brackets, anything? A As far as I saw of what timber was there, or about where they were, there were none of those small tail ends of split timber that I saw. They appeared to have been engaged all.

2521 Q When you are there appeared to be some there, do you mean that they had been burnt off, or that there were some burnt or engaged? A I said that any of the split timber that was there had none of those tail ends. They appeared to be engaged all. There are some small props, and there are some of these split props.

2522 Q In addition to the timber, did you notice the brackets? A I cannot say that I noticed any brackets burnt. It might have been; but I did not pay that particular attention.

2523 Q Did you notice on the ribs either any indications of burning? A No, I cannot say that I did, on the ribs either.

2524 Q Can you say whether there was any broken timber near either of these bodies? A No, I cannot say that I saw.

2525 Q Do you know whether the lamps were near the bodies? Were lights? A I believe that — (interrogated)

2526 Mr. Woods: Would it not be as well, for the sake of accuracy, to know what he himself saw, and what he was told?

2527 Mr. Jones: The witness is very careful about that. I noticed that when he came to something he was told he was careful to say so.

2528 Mr. Woods: What about the lamps? A I believe, as near as I can think, that the one's lamp was in the way that he had—down to the top, I think it was. I know there was one lamp that I brought up, but where the other one was, I cannot say. I believe it was the one's lamp that I brought up.

2529 Q What do you mean by "near the top"? Do you mean fired on the top? A You see, I might have the top there, and the lamp might happen to fall off the top, and be close to it. I know the lamp came out with the stretcher, and I believe it was the one's.

2530 Q Did you notice, when this body was lying, whether it had left an impression in the dust? A That I cannot say.

2531 Q Was that place a damp place or a dry floor? A I believe they are all dry that I saw. I saw no mud on them.

2532 Q Can you remember whether, when you turned one of the bodies, you turned it out of a dirty place or out of a damp place? A Well, I believe it was all dry. It must have been damp, because it was all dry. I know the back heading that we went down first down. Pardon? That was very dirty.

2533 Q Did you notice what sort of dust was lying there—black, or gray or what? A No, I cannot say that I did notice what sort of dust it was.

2534 Q Did you notice whether there was any other amount of dust lying over the bodies? A I know there was dust on all these bodies.

2535 Q But apart from the ordinary pit dust that would get on the clothing, did you notice any other sort of dust? A Oh, well, you might call it sooty dust, or anything like that, but there was dust on them.

2536 Q That is what I want to know. Did you notice whether the dust on them appeared to have been burnt? A That I cannot say. That is a very serious question—whether or not it was burnt or not.

2537 Q I would like you to be careful of this—was the dust that was lying on the bodies appeared to have been engaged or burnt? A Well, now, I think that would take a chemical test to measure that.

that question. In my opinion it might be burnt, but then I could not swear it was burnt. In my opinion this was the dust that fell after the explosion, but that is only my opinion.

Q Now, are you told as of any other body found over Morris and can't? A I cannot. There were only the two in that part of the mine that day. Those were the last two that were found on Saturday evening.

Q Can you tell me of any body that you yourself turned over, and put into a truck? A I think I overhauled some of the ones that I turned over and put into a truck.

Q Where was that? A In Powell's Flat. He was an elderly man. It was on the right side of Powell's Flat.

Q What name was that? A Crawford, I think, was the name.

Q Were they all strangers to you? A Yes.

Q Were they all? A Yes, that body being? A No; it did not show any signs of burning. Where the two were all the bodies of the other bodies, the best of this was all complete, which drew my attention to the other two. There were several, but I cannot tell you their names.

Q Were any of the bodies that you wanted to bring up from Powell's Flat in any way burnt or damaged? A I cannot say that one body was lifted at Powell's Flat around it. They did not show signs of being burnt.

Q They may have been, but they did not show it openly enough for me to see it on the mine.

Q In addition to the bodies in Powell's Flat are there any other bodies that you yourself turned over and helped to put in a truck? A No others.

Q Then the only bodies that you think were burnt were the two Maxims? A The only two I saw.

Q Was there any sign of these having been in the vicinity of Powell's Flat? A Oh, yes; you could see there had been some there.

Q Why? A Because you could see the roof displaced where it had passed over.

Q What do you mean by displaced? A Well, it looked a sort of blackness on the roof that it could always come in a mine. I will explain what I mean: on coming down the main road you see a white line and where the roof has been taken out. When I went there, of course, I saw quite a different affair altogether. It was a different colour—the roof was black.

Q What sort of colour? A It was a darkish, well—sootified—affair as you passed along.

Q Was it a dull black? A Yes.

Q You say a sooty appearance? A Yes.

Q Did you examine it? Did you feel it with your hand? A You could easily mark it. My hand was soot-covered then. You could easily mark it in this place, between the main tunnel it was quite different.

Q Did you say you had frequently marked the roof? A Yes, because we had a very bad light—the lamps were not showing with red and really some men we used to keep bump our heads.

Q Can you say really that there was soot along the roof?

Q Mr. Powell he said sootified.

Q Mr. Moore? A A dark appearance which he described as sootified.

Q Did you get anything on your hand when you felt it there? A Well, you see, you would get a blackish—on black mine—sort of stuff. I could not really describe it so that you gentlemen could understand it.

Q What was it like? A Well, it might be the same as if you rubbed your hand along the kettle, but not so black; not so dry as that, but of a deeper, grayer colour.

Q Can you tell me where it was coming of, say to Powell's Flat, that you first met that black matter on the roof? A I could not really tell you that. You see I am not acquainted with the mine, and not being acquainted, I could not really say.

Q To what extent did that appear in the case of Powell's Flat? A Well, I don't know; it did you notice it only in any particular place? A No, I believe it had kept all over it, in my opinion.

Q Mr. Brown Smith? A Oh, over Powell's Flat? A Yes, all over and round there—round that body.

Q Mr. Lyngsby? A In addition to that on the roof, did you notice the bodies dark there? A The bodies was dark in some places, and the mine looked dark. We had to struggle through the mine (narrow the roadway was).

Q Keep to the bodies? A We had to clear some out of the road to get through to the dead bodies.

Q Was the body or cloth burnt or soiled at Powell's Flat? A Then I cannot really say; because I did not examine that closely to see if it was burnt or soiled. I was simply hurrying to get those dead bodies away, and we started it away out of the mine and went on.

Q Did you notice whether the people were any different? A There were very few people going down where I am telling you; only the dust that I tell you of that was broken up, and there was some there when I got there. Whether it had been a door or a window I cannot say, but it appeared to me that there had been a window, as it had been crushed in pieces.

Q Well, that I did not appear to be burnt.

Q Did you notice any grey dust lying on the floor? A That was all down the back heading, and all through there there was a lot of dust on the floor.

Q I mean, not the natural black dust that you see but a thin grey dust? A You mean the dust that falls by the way. There was plenty of that there, but not the dust that you meet in a coal seam on a day place. In a day place at the coal face there is always a certain amount of dust, but in a coal seam it is always a certain amount of dust on the ore that falls on the longer and on the floor, and there was a lot of that in the back heading.

Q Did you notice any grey dust—that is, coal-dust—that apparently had been burnt and gone to ashes?

Q Mr. Brown Smith? A What does he mean by black heading?

Q Mr. Lyngsby? A Do you mean where Morris was found? A No. You could not get down the rope road to Powell's Flat. You had to go down the back heading to get down to Powell's Flat. There was a white line in the main road. He was down at this hill I spoke about.

Q Was this white line burnt or soiled? A I could not tell you.

Q Did he burn on? A I could not say. There was white line on him. Another man went and put him on him to keep the mouth down.

- 5256 Q How do you know you were at Powell's Flat? A Because some of the men that were with me belonged to Keweenaw, and they will go where Powell's Flat, and that is where we started out to go.
- 5257 Q If I show you where Powell's Flat is on the map can you show on this back heading? A I think I can.
- 5258 Q Here is the 8th Right page, read, up here is where Martin was found, and here is the 4th Left travelling road, and here is Powell's Flat (indicating them on the map)? A I came through this (points out). What heading is that? Is not this the back heading?
- 5259 Q Yes. That is the back heading you refer to? A Yes.
- 5260 Mr. Justice. Q The back heading between Swisher's Flat and Powell's Flat? A Yes.
- 5261 Mr. Justice. Q In there anything you observed anywhere during that expedition that you want to tell the Commission,—any accident you can give the Commission as to what caused the disaster? A Oh, I could not prove to them what caused it. Of course, I believe it was by the gas; but, of course, that is my opinion only.
- 5262 Q Now, coming to these recommendations. No. 1.—"Manager, under-estimates, despises, and shut-outs, to hold certificates of competency by commission." What do you say regarding that? A I am not quite of opinion that it should be so, then they should all understand these weak thoroughly before they are allowed to undertake it.
- 5263 Q Who is the Manager at Old Bull now? A Mr. Johnson.
- 5264 Q Is he notified by examination? A That I really could not tell you. Some say yes, and some say no. Of course, I am not certain.
- 5265 Q You say that some say yes, and some say no? A Yes.
- 5266 Q Whom do you mean? A Some of the miners.
- 5267 Q Do you know that the miners object to Mr. Johnson's being Manager? A I do not know that they object under that light.
- 5268 Mr. Wade. I assume there has been an accident.
- 5269 Mr. Justice. I ask him does he know if any of the miners object to Mr. Johnson.
- 5270 Mr. Wade. I object. If the question is put as to whether there is an objection to Mr. Johnson because he has not got a certificate by commission, then it may have something to do with this inquiry.
- 5271 Mr. Justice. I will put it that way.
- 5272 Q Do you know whether the men being of the opinion that Mr. Johnson is not a Manager certified by commission, they have an objection to his continuing as the position of Manager? A No, I do not know that.
- 5273 Mr. Justice. Q Do you say they do not know that? A Some of them might say. I do not know. I will not say what the miners know. I will only speak for myself.
- 5274 Mr. Justice. Q Who is your stand-by at Old Bull? A One is Ted Rowan, and the other is Pete Woods. They have brought and brought about on the night shifts. No shots are fired in our mine, only at night, so the one who is on at night for the forenoon has the shot and hole.
- 5275 Q What lamps have you in Old Bull? A Safety.
- 5276 Q How long have you had the safety? A I would safely say about three months, as near as I can tell.
- 5277 Q And before these safety were introduced had you ever seen gas at Old Bull? A Oh, often, often, and I have been told of it by the deputy in the morning.
- 5278 Q Well, say, the last twelve months, how often have you seen gas at Old Bull? A I cannot speak since the lamps were in use.
- 5279 Q Before the lamps? A During the twelve months before the lamps were introduced, I might say I could see it nearly every day if I liked to look for it.
- 5280 Mr. Wade. Q Did you see it? A Very nearly every day. If I did not see it, then I could hear it.
- 5281 Mr. Justice. Q When you say you saw it, did you ever light it? A Yes, often.
- 5282 Q How often? A I might light it once or twice a day accidentally by hanging the lamp on the side of the rib and going to cut, and I might just happen to hang it where there was what you might describe as a blow, and it would light, and it would be worse light than it would be not—just firing like a battery.
- 5283 Q And that was an everyday occurrence? A Yes.
- 5284 Q Did it ever light along the road with you, in addition to lighting that way? A No, never—went with me.
- 5285 Q Were you present when it ever lit along the road in any other place? A No.
- 5286 Q Did you not consider it dangerous when it used to light like that? A No, I did not.
- 5287 Q Do you consider it a danger now? A Well, if the same procedure was taken now as was taken before the introduction of safety-lamps, I should not consider it dangerous.
- 5288 Q What were the precautions you speak of? A They did many things then. They always carried us close to the face, and never went more than 30 yards before they got a cut-through. I have put a cut-through in 20 yards where it was required. But, if they neglect those things now—[Interrupted].
- 5289 Q Do they neglect those things now? A We have not had time to prove it.
- 5290 Q But have they as far as you have observed not been so cautious,—have they relied upon the safety-lamp? A There are no blowings going now, so I cannot say that.
- 5291 Q But have you noticed it yet? A I cannot say. There are no places extending ahead, and when we are not opening out ground those things are not likely to occur.
- 5292 Q You say you could hear gas—what do you mean by that? A Well, you could hear it, because it is something like a blow. Lots of miners say, "Well, you have a blow in your corner." It just makes a noise similar to that.
- 5293 Q You say the deputies told you something about gas? A Yes.
- 5294 Q What was that? A When I used to go working the main heading, of course, at night, we might have on a certain amount of cut at the day before, I would cut at the day before, I had and have her lamp, and next morning going in the deputy would say to me—[Interrupted].
- 5295 Q What deputy? A John Cook.
- 5296 Q What would John Cook say to you? A He would say to me, "Marshall, keep your light out of the cut." That would tell me that, before I went into the cut to work, I would hang my light on the side side, back a piece.

5030. Q Then is that you could not wear your light in your cap? A No.
5031. Q You had to carry it away from where you were cutting the coal? A Yes.
5032. Q Did he say anything besides "Keep your light out of the way"? A No, he knew that I knew what he meant by saying so.
5033. Q That was what? A Well, that he had reported that there was a certain amount of fire in the coal.
5034. Q Fire? A Yes, gas.
5035. Mr. Wade. Q You said that he would report that? A He would report that; he had reported that, and he would report it to me, sure as, before I went in.
5036. Mr. Lupton. Q Now, did you not consider it dangerous to work with a naked light, even outside the coal, if the coal was going off as? A Well, no, not when she was well a mile. I did not consider it dangerous, because I saw the Chief Inspector come in there, and try her with his lamp—his hydrogen lamp.
5037. Q Was any one near the Chief Inspector by her? A Yes.
5038. Q Was any one near the Chief Inspector by her? A Well, he did not tell me that.
5039. Mr. Wade. Q He thought it was safe at all events.
5040. Mr. Lupton. Q He did not say so, he does not know what the Inspector thought? A I did not know.
5041. Q In addition to that deputy, has any other deputy told you anything? A No; that is the only deputy we knew in Hill Road.
5042. Q And that is the same mine where the big disaster was some fifteen years ago? A Quite near.
5043. Q Were you working in that mine at the time of the old disaster? A No.
5044. Q I want still to know what precautions were taken when, in your opinion, rendered that place safe? A Well, all things were put over at very short distances.
5045. Q What short distances? A Well, 30 yards, at the outside.
5046. Q And the miners was always kept, I will say, well up the face. That was in the mine heading.
5047. Q If either of these precautions had been neglected in the slightest, would the place have been dangerous? A Yes.
5048. Q Did you ever see to leave any of these places because the miners was not sufficiently up to the face? A No, I never had.
5049. Q Now, with regard to shutting down the face when the hole is put on fire? A The miners.
5050. Q And is it there when the shot is fired? A No.
5051. Q Who changes the hole with the powder? A The deputy.
5052. Q Did I understand that all the miners does it to have the hole? A Yes, and leave it, and report it to the night deputy, and tell him that he has found a hole, and the night deputy comes in and looks it, and finds it.
5053. Q And the next morning you go in and pull the coal away unless you are on the night shift (no more).
5054. Q I am speaking of yourself in your duty between a shift? A Yes.
5055. Q If not on the night shift, when is the shot fired? A It is holed, and it is fired while they are there. They are present in that case.
5056. Q Do I understand that they are not fired for the day shift because it is dangerous to have the men there? A That is quite right.
5057. Q Then is it not equally dangerous to the men to fire while they are there at night-time? A There are only a few men.
5058. Q Is it not equally dangerous when there is only one there? A Quite so.
5059. Q Do you consider that a safe practice? A It is not a safe practice, but it is something in the line.
5060. Q Is not it a dangerous practice? A Yes, it is a dangerous practice when anybody is there; but they have to do it.
5061. Q During the night shift who changes the shot? A The deputy.
5062. Q Do you know how to do it? A Yes.
5063. Q How? A By a wire.
5064. Q Have you ever known him to open a safety lamp to ignite the face? A No, it is locked. He cannot open it.
5065. Q Would the opening of the safety lamp to ignite a flame, in your opinion, be a dangerous proceeding? A I should think it would. The night shift will have a naked light there.
5066. Q Do you know whether this standard at Old Butts has had any experience as a shot-fire? A Well, of course, there are no old miners; and I could not say whether they have experience or not. I know they have been old miners in Butts for years and years. I could not speak for these old men as shot-fires, only as old miners. I know there are both men who have never but never in the mine.
5067. Q Now, recommendation No. 3—Inspectors should be vested with absolute powers to order the use of safety lamps. What do you say in support of that? A I should say that Inspectors ought to be entrusted with power to do so when they see danger, but at the same time they ought to have the power, when they come into a mine, to see that the headlight and these things are carried out to the same extent when the safety-lamp is used as when the naked light is used; and so not have the men killed through having safety-lamps in.
5068. Q What you mean is that you would act only on the safety-lamp alone, but you would want the Inspectors to have absolute power to make the management carry out the other details? A Yes.
5069. Q Shutting out that? A Yes, keeping it up to the face.
5070. Q Do you know of any mine in this district where an Inspector has suggested the use of safety-lamps, and the management have refused to put them in?—
5071. Mr. Wade. I would not it be better to confine this to Butts? It is so easy to find the exact men, and the exact people to whom Mr. Lupton refers, and to ask them about it.
5072. Mr. Lupton. Q I will ask that. Do you know that of your own knowledge? A Of course, I do, but it is a private question, and, you have asked me. Of course, I know it privately, you know that I know that I know that the Chief Inspector asked them two or three times.
5073. Q Where? A In Butts.
5074. Q I do not care whether it is private or not. I want to know all about it? A Simply we had to put them in when he sent those letters about them, and we wanted to get them out, because we knew there was no necessity for them.

Witness—H. M. Mott, 25 January, 1939

2434 Q Do you want Chief Inspector Adkins? A I believe it was he. It came from that direction.

2435 Q That then? A I want to say it came from the Inspector. I cannot say whether it was the Chief Inspector or Mr. Watson.

2436 Q How long was that, before the lamps were put in, that the request came to put them in? A. Merely a few weeks. Of course, I could have seen the letters.

2437 Q Did you see the letters? A. I did not read them.

2438 Q Why brought you the letters? A. I will tell you, if you will allow me to explain, how it came about. I want as a disposition of one suggested by the names, thinking there was no necessity, to see Mr. Johnson about not having the lamps in, because it was a great reduction to me. Of course, he showed me that he was positive. He said, "Here are letters from the Mines Department, and I have got to put them in or take all responsibility." So of course we closed down that when we found where it came from, and nothing more took place.

2439 Q And you think the Inspector ought to have that absolute power? A. I think he ought to have it at the time that he carried out the order.

2440 Q Now, No. 2—You believe he, because prohibited, and fine substituted? A. I have not in Old Bull—a far more or less? A. A. I am sure.

2441 Q Can you see a letter, as any concern the one has been received in Old Bull? A. Not in Old Bull, but in other mines I know.

2442 Q Is there more in that district? A. Not in this district.

2443 Q And you approve of that recommendation? A. Yes.

2444 Q Recommendation No. 3—What evidence is he based on and surrounded by others, always such return away is not in contact with others? You approve of that? A. I do.

2445 Q Recommendation No. 4—Cut throughs not more than 20 yards apart? A. I approve of that.

2446 Q In your opinion, would the cut-throughs every 20 yards of all weaken the security of the road? A. No. They are put there for a purpose as to feet if they wish to do so. It would not be noticed.

2447 Q Recommendation No. 7—Monthly recommendations by deputies and District Inspector with testimony same? You approve of that? A. I do.

2448 Q Recommendation No. 12—Extra supply of safety lamps and regulators, equal to one-third of number of persons supposed to be on ground, to be kept constantly in good order and ready for use? You might tell us what your experience was in Keweenaw in regards safety lamps? A. I think the safety-lamps, even on the third day, were not what they ought to be.

2449 Q Is what may were they deficient? A. There were a few very good lamps, which would show a light, but there were others, none far enough, that I took in myself, that went out—had out.

2450 Q Was that due to the wind? A. I am not sure, I did not examine it. There were some that were not.

2451 Q We set two or three miles in the dark, then put in the dark also. There were a few good lamps, and there were a very few, in my opinion. Well, I can see—now I am using a battery lamp—the difference, it was a great deal.

2452 Q Do you know whether the lamps were taken from Old Bull for Keweenaw? A. No, none.

2453 Q Had you any lamps at Old Bull? A. Yes, we had, at that time we had nearly 200. We have broken many of those up since, and we have a good lamp now.

2454 Q Were those 200 in good order? A. I could not say.

2455 Q You have broken them up since? A. Yes.

2456 Q His recommendation No. 11—Traveling and landing roads to be properly watered? Do you water the roads in Old Bull? A. Yes.

2457 Q How? A. We have a sprayer tank, which is fitted—well, you can see one of those spraying carts by Sydney?

2458 Q Yes. A. Well, it is fitted exactly on the same principle.

2459 Q Does that travel all over the mine? A. Yes; and for the course of the road we often send it made fitted on a stand, and they drive the plug out at certain places and let it run.

2460 Q Was that done before the Keweenaw disaster—the watering was a water-cart like those used in Sydney? A. Yes.

2461 Q For how long? A. I could not say. I do not know when this tank was first used. I know it has been there for a long time.

2462 Q Is Old Bull a dusty mine? A. Old Bull, the part which we call now Old Bull End, was very dusty, but Sydney is different. There are some very wet places in it.

2463 Q Was this Old Bull End dusty, then you were continuously watered to keep the dust down? A. That I could not say—at that time.

2464 Q For the past three or four years has it been watered with this tank like a Sydney water cart? A. The roads were; but the Bullmouth did not require it.

2465 Q I am only talking about the Old Bull district? A. Yes; but the Old Bull district is down with Sydney. What I want to show is that years ago, at Old Bull, they did systematically water the main roads.

2466 Q For the main traveling roads? A. Yes, for the main traveling roads.

2467 Q Did you yourself see them do that? A. Oh, yes.

2468 Q When the traveling roads reached with water? A. There is no traveling road, there is only the one road to and out of the mine.

2469 Q Recommendation No. 13—"Machines should be self-starting." Are the machines large enough in Old Bull, as to start? A. The machines are about 1 foot deep by 1 foot wide.

2470 Q And I suppose 1 foot high? A. No, I do not see they are all 1 foot.

2471 Q Do you know of any instance where the machines have not started large enough? A. No.

2472 Q Recommendation No. 14—"Instructions to employers on means of escape." Have those made been put out in Old Bull? A. Yes.

Verona.—W. Marshall, 20 January, 1908.

- 5223 Q You know it is an antique here? It is one of the chairs made by the master? A Quite true.
- 5224 Q And if you can give no instance of it, if you bring no instance in this way, it will make your chair all the stronger? A Quite so; but I will bring no more.
- 5225 Q I will give you the chance if you want it? A I will not accept that chance at another man's loss.
- 5226 Q It would be all right for me to take the chance?
- 5227 Q Is it desirable in employment now? A Yes.
- 5228 Q At Ball's? A Yes.
- 5229 Q How long has he been there? A I think he has been there so and off about five years. I could not say exactly.
- 5230 Q He has left and has been taken back again at the same place since he first went to Ball's? A He was at Ball's before the explosion.
- 5231 Q And since you have known him he has actually been to Ball's, has left, and has been taken back again? A No. I do not know that he has left and been taken back. I was reckoning up how long he had been there before the strike we had. I know he has been there since the strike; that is just about three years.
- 5232 Q That is just the very thing I want. You mustn't shrink? A Yes.
- 5233 Q Refused to work? A We did not refuse to work at all; we got locked out.
- 5234 Q You asked it a strike? A No, it was a lock-out.
- 5235 Q It is worse still. It is a lock-out? A Yes.
- 5236 Q Did the Managers take the men Dryden back afterwards? A He had to take every man back by the terms of the arbitrator.
- 5237 Q And he has stayed on since? A Yes.
- 5238 Q Why did you give Dryden's name? A I gave Dryden's name because he was a man that was known all over the district. What is known to day.
- 5239 Q And are not the other men known all over the district? A I do not suppose they are, because the man here simply cleared and left the place.
- 5240 Q Well, it can be no harm to them if their names are given? A Oh, yes, there may be some at their home in other ways.
- 5241 Q Have you reported things when you thought necessary yourself? A Yes.
- 5242 Q And have you been continuously employed during the whole twelve years? A Oh, no.
- 5243 Q You were away when you were locked out? A No, I was not.
- 5244 Q Where you in the mine during that time? A No.
- 5245 Q With that exception, have you been employed there continuously during twelve years? A No. I have been there when I worked. I went prospecting on the goldfields, perhaps, for a short time, and returned again.
- 5246 Q How long has Mr Johnson been Manager? A I cannot say.
- 5247 Q How long has you known him,—how far back do you know? A About seven years, so soon as I ran there on.
- 5248 Q Now, with regard to the strike (Recommendation No 35), Mr Lysaght put it to you last time as a rule the one may cut from the mine? A Yes.
- 5249 Q There is more than one way, is there not? A No.
- 5250 Q What is the suggestion you refer to? A Well, you could not go up the furnace.
- 5251 Q You said you knew the way up through the furnace? A I said I might be able to find my way out by the furnace—that is, providing the mouth of the tunnel was not closed.
- 5252 Q How would you get out by the furnace? A You would come to the furnace.
- 5253 Q What would you do then? A Try to make the best of your way out.
- 5254 Q Is there no daylight tunnel cut? A No. The furnace is not a great distance from the mouth of the tunnel, and, of course, if you got back through the group in the furnace, you might be able to make your way out through the tunnel, if it were not closed.
- 5255 Q Now, with regard to the watering of the roads (Recommendation No 12),—the road in Ball's is a main and not rope road? A Main rope road.
- 5256 Q And the shops come out in teams of about how many? A From twenty to sixteen.
- 5257 Q What pace do they travel,—do they go as high as 14 miles an hour sometimes? A Oh, no.
- 5258 Q It may be a fair step to say they go as high as 12, take the place you go on in yourself,—how far do you go to Hill End to your work? A About 2 miles.
- 5259 Q You need to get a ride in the waddy shops returning to the face,—how long would that take? A About twenty minutes, sometimes more.
- 5260 Q So you need to go at least 5 miles an hour? A Yes.
- 5261 Q And that would be a good deal slower than the full train of shops coming out? A Well, it is about five minutes' difference, because if they bring them any faster they will pull the road out.
- 5262 Q And those twenty shops in a train, going at least 5 miles an hour, throw up a lot of dust? A Yes, they do.
- 5263 Q And they travel on the road which has been watered for a number of years? A Yes.
- 5264 Q Now, let us get some idea of the dust,—the dust there is very often over your ankles? A When?
- 5265 Q At Ball's? A Not so the main road.
- 5266 Q That is because it is kept watered? A Yes.
- 5267 Q Now, was it not actually over your ankles? A No. Where?
- 5268 Q Is what you call Hill End,—was not the dust in some of these headings even lately over your ankles? A No, I never saw dust in my life. I never saw dust that high. I saw much lying where the shops had been used for filling up places in the road, when it comes to a place where the road dips into the mine, as soon as we strike the stone, in the main heading we only take 6 feet 3 inches, and in the narrow heading 5 feet, and that is filled up.
- 5269 Q That hole the ordinary dip road, where the shops run, is not the road choked up by the breeze,—does not it get very deep there? A It gets to a fair depth, but not like what you are describing.
- 5270 Q And these parts are also watered? A Yes.
- 5271 Q What do they use there,—the tub with a plug in it? A Yes.
- 5272 Q Is that what you describe as very dirty? A No.

2773. Q. What a minute.—I want you now to tell me whether you are speaking of the main horse road headings, or whether you are speaking of a heading which is not a main horse road heading? A. In the main horse road heading there is no such dust as that; but it may be in a bit of a bye-heading where there are only five or three horse workings.
2774. Q. There is the main horse road heading, you would not want the warning—it is not necessary? A. No—it seems to me, that it is not absolutely necessary, and the dust is not in there.
2775. Q. In those parts it is kept continuously watered, and the dust has no chance to get dry and it makes damp? A. No.
2776. Q. But in the side horse road it is not watered continuously, and at times it does get dry? A. Yes.
2777. Q. And does it get to a depth of 7 inches? A. No, not so deep as that.
2778. Q. How deep? A. I might say you could kick it along with your foot when you are going.
2779. Q. There are five dozen things that come against road, the main horse road heading, and the bye-road heading? A. Yes, that is what I mean.
2780. Q. I suppose you workers at Bull always walk out from your work? A. Yes.
2781. Q. As a matter of fact you have to walk out along the road in which the two frames of clips travel? A. Yes.
2782. Q. And you have got rooms—in fact it must be so—in always keep clear of the trains as you are working out? A. Now, Mr. Wells, I am not going to answer that before I know what you mean.
2783. Q. Quite right? A. Do you mean that I am walking all the road alongside the rails and be clear of the clips? or do you mean that I have shoulder bars and there is no dust?
2784. Q. The first heading has been there for many years, and there is no dust, and there are no clips either approaching them or passing them? A. There was one killed before my time, and there was one killed in my time, but I cannot tell you how he was killed.
2785. Q. All you know is that he was killed? A. He was killed by the net on the road, but I could not tell you how it happened.
2786. Q. Your main I understand with regard to Bull is this: that the main fact that you know there is gas there is not a ground for at once putting up safety-lamps (known regulation No. 2), but you would first see that the ventilator was working? A. The first of—[Interrogated]
2787. Q. Supposing you were working and saw gas? A. Yes.
2788. Q. You would not rush off at once and say "We must have safety-lamps"? A. No.
2789. Q. If you were in authority, you would first take steps to see if the ventilation was deficient? A. Yes.
2790. Q. And if it was deficient, you would see if you could improve it? A. Yes.
2791. Q. And you believe that it is quite safe to work in such a place, if you have sufficient ventilation to carry off the gas? A. Yes.
2792. Q. And then if it gets too big an amount of gas, and the ventilation cannot carry it off, then you think of putting up safety-lamps? A. Yes. The first you would be to improve the ventilation, if possible, and then, if it could not be done, safety-lamps would be ordered, by all means.
2793. Q. Then there is this further step, that you might even try some better method of ventilation before you resorted to safety-lamps? A. Yes, I would do that. Of course, I would take great precautions, during that time, to see that there was no displacement of the breathing, or anything like that.
2794. Q. You may have some temporary displacement of the breathing in some particular spot? A. Then the men ought to be withdrawn at once.
2795. Q. You would remedy that? A. Yes.
2796. Q. And if the ventilating power was not sufficient, you would suggest that? A. Yes.
2797. Q. And then, if these things failed, you would think about safety-lamps? A. That is true.
2798. Q. And I understand you were satisfied with the conditions in Bull with the naked light at the time? A. Yes; we were satisfied at that time.
2799. Q. Now, I want to get it quite clear about this shot firing—was it only in a particular part of Bull that they have had shots fired under the naked light system? A. Under the naked light system?
2800. Q. You have had safety-lamps all over Bull have you not? A. No, only Hill End.
2801. Q. Before that the shots were fired at night? A. Yes.
2802. Q. But in Hill End only? A. Yes.
2803. Q. But in Cox's, that is the other district, at the other end of the hill? A. Yes.
2804. Q. Cox's have been working on the naked light for years and years? A. And are now.
2805. Q. And the men there fire their own shots, do not they? A. No, they do not. You are not allowed to fire your own shot in Bull.
2806. Q. Who loads the powder? A. The men. You have to pay for your own, but the deputy loads and fires.
2807. Q. I thought you told me that it was only in Hill End that they fired at night? A. Quite so. In Cox's you can fire in the day time, but you cannot fire without the deputy to load and fire.
2808. Q. Then, in Hill End, the shots are only fired at night? A. Yes.
2809. Q. At Cox's you can fire the shots in the day time as night—but you have to get the sanction of the deputy first of all? A. The deputy comes and fires it and sends it down.
2810. Q. And he just takes the ordinary precautions to see that there is no gas about? A. There has not been gas ever there.
2811. Q. It is in active precaution which really is not necessary? A. Well, I do not know about that.
2812. Q. So far as the presence of gas goes? A. So far as we know.
2813. Q. So far as you know there has been no gas there to cause any risk in Cox's? A. Quite so, so far as I know.
2814. Q. When you speak about seeing gas in the last twelve months nearly every day—[Interrogated]? A. Not the last twelve months. I told the bench a number previous to the bridge going in.
2815. Q. You are working in only one part of the Hill End district? A. There is only one part working.
2816. Q. You are only speaking of one part of the Hill End district, where you worked for twelve months, say the whole of last year? A. Yes.
2817. Q. How many headings were there altogether? A. At the commencement of last year, I think, there were six headings, which you saw yourself.

Witness—Dr. Marshall, 20 January, 1906.

- 5218 Q. I did not see the best? A. Of course, you looked out that you did not see that.
 5219 Q. There were no less dogs—your nose approaching a head or left of center in that part of the
 head? A. No, that is going to the jump. That is no order there.
 5220 Q. You have pretty well worked out the whole of that part through coming to double or double
 cases? A. These things are not present in the buildings are getting nearly all stopped. There is a
 proceeding leading toward. I do not know what she will bring.
 5221 Q. Do you know whether they are more likely to find you in the neighborhood of these buildings
 than in the place where the scene are perfectly well? A. Yes, I think before you are right.
 5222 Q. Was it always in the buildings that you found the dog? A. No.
 5223 Q. Did you ever find it in the head? A. Yes, the last head I found previous to getting in the
 house, I put a letter through one—I might say about 20 years. It might be a little more—into the other
 head, to get a better result and have the same.
 5224 Q. Did you see the dog there? A. Yes. The under-manager said to my nearly every day, and I have
 seen a show of it on his lamp, and at other times I have let it myself, but only just a little thing coming
 out of the end.
 5225 Mr. Bruce Smith: Q. What is the under-manager's name? A. Charles Hays. He used to try
 nearly five days out of me.
 5226 Mr. Hays: Q. Now, about these safety lamps—how did you first come to hear about the Inspector
 asking for safety lamps to be used? A. Well, I am telling you now.
 5227 Q. From Mr. Johnson? A. Yes, he said, may not be both.
 5228 Q. What first took place was that, was not it that Mr. Johnson wanted safety lamps used? A. No,
 he simply put up a notice saying that so and after a certain date safety lamps would be used in Hill Road.
 5229 Q. He wrote a notice and put it up? A. Yes.
 5230 Q. And up that you were much obliged? A. Yes, quite true.
 5231 Q. And when you went to object to the use of these lamps you found out that Mr. Johnson had
 got a request from the Chief Inspector to put them up? A. Yes, from the Department of Mines.
 5232 Q. Was it that the only occasion that you heard the management propose to put safety lamps in?
 A. Yes, that is the first we knew of it—when the notice went up.
 5233 Q. There has been an accident on Hill Road you have been there, from gas? A. No.
 5234 Q. In any shape or form? A. None that I am aware of.
 5235 Q. Before an explosion or a man being hurt? A. None that I am aware of.
 5236 Q. With regard to your examination of Mount Kemble, I suppose you took a note, did you?
 A. No, I took no note.
 5237 Q. And I suppose you have not discussed what you saw there with anybody since? A. I may have
 talked the Inspector over, the same as miners do, run with the other. We often talk in the mine of what
 we saw and did not see.
 5238 Q. What the thing was fresh in your mind you would compare notes and discuss things you had
 seen with other men? A. No, I did not compare notes.
 5239 Q. You would discuss what you had seen and what the others had seen? A. Oh, yes, we would
 do that. We might not discuss what we had seen, but given an opinion upon what we thought it was.
 5240 Q. Now, what was your mind chiefly fixed on? Getting out these miners? A. Well, that is what
 we want them for.
 5241 Q. More than examining, I suppose, as to the cause of the disaster? A. Well, of course, we had
 a certain number of bodies to get, and especially that happened to be in the mine was intended to see
 and know as much as we could.
 5242 Q. Can you tell me now, if Morris, master, had a head or not? A. Well, I told you that to that I
 was not prepared to swear.
 5243 Q. Did he have any hair on his face? A. I do not know, I think the most of it was gone,
 according to his hair.
 5244 Q. I do not ask you what he used to have. Did he have any hair on his face then? A. The first
 two men that got to these men covered their faces with quick lime, and it was only when you moved
 them. They covered their face because we could not easily approach them.
 5245 Q. I understood. I want to know, was your opinion whether Morris, master, had any hair
 on his face then? A. I tell you I cannot tell you, because as soon as we got them on the stretcher, the first
 thing we did was to cover their faces, and even when they were covered, we tried to keep their faces
 covered from the public, even after we got them in the mine.
 5246 Q. Then the head was exposed a very short time by your plan? A. No, their heads were exposed
 all the time. But so there something else was not to show their faces.
 5247 Q. If the head was in your view—[interrupted] A. I had the head in my hands. I tried
 it with my hands.
 5248 Q. Will you swear there was hair on the face or not? A. I am not certain. I will not swear.
 5249 Q. Did the doctor have his facial shot on? A. I did not examine into his clothes. I tell you he
 had his coat on.
 5250 Q. Was his coat buttoned? A. I could only swear what I know.
 5251 Q. I want to know if you can tell us whether his coat was buttoned or not? A. I will not swear
 whether it was buttoned or not.
 5252 Q. Which one was it had the skin on his breast detached? A. That was the young fellow.
 5253 Q. Were they before as you could see, thoroughly black? Were their skin all blackened? A. Their
 skin was blackened, but I will not say it was thoroughly black.
 5254 Q. What colour was it? A. It would be hard for me to tell what colour a man's skin is when it
 was blackened by coal dust.
 5255 Q. That is what I want you to tell me? A. It had been blackened, but I could not tell you what
 it was.
 5256 Q. Was the whole body as far as you could see, blackened by coal dust? A. As far as I could see,
 it all had coal dust on it, only, as I told you, when you looked the breast the skin came off.
 5257 Q. You mean that it is very much blacker than the ordinary condition when a man is at work? A.
 I cannot agree on that. It is so much blacker than a man is doing in a mine.
 5258 Q. You know how much coal dust a man gets on his face? A. It is according to what he is
 doing. If I am in the air all day I will come home looking more or blacker than a man that is working in the
 face. It is impossible to answer with a question as that on coal.

2485 Q Now, did the appearance of the father give you the impression that he had finished his work for the day? A He had evidently finished up was going to start. You could not say which. The man had his coat on, and I remember when he has his coat on that he has either finished or is just going to start. I would never put him on either under those circumstances, or except on an occasion when I was going to have dinner and there is a strong exception of age.

2486 Q This was long past dinner-time? A You cannot say. Men eat their dinner at all hours.

2487 Q But it is a late hour—about 2 o'clock? A Yes, I would reckon it was late for that.

2488 Q And the boy seemed to be—? A He wore

2489 Q As if he had been at work? A Yes.

2490 Q And was apparently trying to run away from something behind him? A Yes, he had his pipe in one hand and his cap

2491 Q He had something at the back of his head? A Yes, he put his hand to the back of his head, with the cap in it.

2492 Q Now, with regard to the pieces of the pipe you saw burned, is not this what you meant that when you took the bucket, you got long splines or splinters, and they tapper off to a point as sharp as a needle? A Something like a blow

2493 Q All you saw was that that blow at the very end of the splinter—? A That goes.

2494 Q And what was missing was this bit of blow at the end of the bit of splinter? A Yes.

2495 Q Now how would the blow be? A Oh, well, it is according to what sort of timber it is.

2496 Q How big? A I have seen it, say, as long as that. (Witness exhibited with his finger on thumb a length of about an inch.)

2497 Q From an inch—? A Down to nothing. Mind, that is only when timber is split green.

[All in the Commission adjourned for luncheon.]

ATTORNEY.

(On resuming at 2:15 p.m., Mr W. E. Pratt attended to take shorthand notes of the evidence and proceedings.)

Mr WILLIAM MARSHALL, previously sworn, was further examined, in order—

2498 J. E. Webb Q You said there was some dust on the road which you said was "scuffed"? A Yes.

2499 Q Did you notice the same kind of dust on the props? A I cannot say I examined the props for that. Old props naturally carry a certain amount, but new props would not carry so much dust on them.

2500 Q You say you were on the 4th Left road? Were you in the travelling road, or the rope road in the 4th Left? A What do you mean?

2501 Q The road between the second and fourth Left—that is that rope road or a travelling road? A A rope road.

2502 Q Were there any props in that road? A I think there may be an old one or two.

2503 Q Did you notice any dust on there? A I did not notice; we were along the props along at that time.

2504 Q Can you say there was any dust? A I cannot; I did not examine them.

2505 Q What circumstances did you make of the dust on the road near Powell's fire—? A I will pass by that.

2506 Q I put my hands against it, and felt the stuff on the hands afterwards.

2507 Q To what effect? A I did not examine it, only just what you would do with your eyes.

2508 Q Did you notice the appearance of the dust on the 4th Left rope road on the ground itself? A I could not say that there was much dust there. The road seemed clear.

2509 Q There was no dust at all? A There was no evidence.

2510 Q I am not talking about evidence? A I told you there was no amount of dust to take notice of. I was passing ships all the time. I had only a little prop up to being the broken up with.

2511 Q Were you in Menzies' working place at all? A No.

2512 Q Were you at the spot where they were actually picked up? A I could not where it was.

2513 Q You saw them picked off the ground? A Yes, I saw them picked off the ground.

2514 Q Were they close together? A They were at no distance away.

2515 Q Did you examine their working place? A No, I did not.

2516 Q Can you tell me where it was where you saw what you call this "flame" substance on the props? A I saw it at Powell's fire.

2517 Q You say the three nails had been slipped off? A Yes.

2518 Q Did you see it nailed anywhere else? A At the place where the dead bodies were, it was slung; but I could not say the name of the place.

2519 Q The "flame" nails had disappeared? A Yes, they had disappeared.

2520 Q Where was this door you spoke of? A In a back building.

2521 Q Between the 4th Left rope road and Powell's fire? A Yes, I do not know it was a door, it may have been a door, it was right towards the way. It was all blown in pieces.

2522 Q Now, about this black bit. Do you object to Mr Menzies giving an account of a workman, if another Mine Manager asks him to do so? A Well, do you mean to be so workmanlike is concerned, or do you mean of any little difference between him and the Company?

2523 Q First of all, does this case—a man has been employed at Hall? A Yes.

2524 Q He is dismissed? A Yes.

2525 Q He goes to Clifton and asks for employment. Suppose the Clifton Manager asks the Hall Manager what kind of character he could give him, do you object to the Hall Manager's stating what he knows about the man, supposing it is truthful? A You say it is truthful. No, if it really is to his benefit as a workman, I do not object; but I object to the Manager's asking whether a man is trustworthy, or whether he is always taking a leading part in accidents, or whether he will cause trouble.

2526 Q Suppose a man is known as being a person who takes a leading part in accidents and matters—would you object to Mr Manager's telling another Manager that fact? A I have a very ill name as an agitator; but it may be that the man is capable of expressing a point and of expressing a point about his propensities. He may then be called an agitator only because of being the mouth-piece of others.

2527 Q Would you object to a Manager expressing an opinion as to that fact? A I would not object if they asked for it, but usually the opinion is their own choice.

Witness—Mr. Marshall, 20 January, 1932.

2501. Q If a Manager asks for it, you do not object? Not as to his using a workman; but I object to their interfering with a man's liberty of speech.
2502. Q If a man reaches his liberty of speech and causes trouble, do you object to use Manager's telling, and that Manager if he likes to do so? Not if he did so.
2503. Q Do you object then, if some have caused, and a man has been a trouble, you do not object to use Manager's telling what he knows? A If he did so—[interrupted].
2504. Q Would you object? A I would not object the way you put it. I object in other ways. A man got damned for being the investigator of other people. His own opinion may differ, but he has to explain what he is sent for, and then he is blamed for being an agitator.
2505. Q Now you say that all waste workings should be sealed off? A Yes.
2506. Q Do you think it a good idea? A Yes, but if they lead into the return air, not to have them sealed off completely.
2507. Q You said you did. Mr. Lynghe asked you whether all waste workings ought not to be sealed off? A Yes, from all intake currents.
2508. Q Can you say that, so long as the air from the waste workings is not mixed with the intake air ways, you are satisfied? A As long as the intake air does not come in contact with them, and provided the air goes through them.
2509. Q You do not wash them sealed off? A Not sealed off.
2510. Q You would have openings, and let the air from these openings go into the return air ways only, A Yes, but the air should not go near the working place.

Continued by Mr. Bruce Smith—

2511. Q Have you given a deal of consideration to these recommendations? A I have considered some of them.
2512. Q Take the one which you have been mentioned about—"That the Coal Mines Act shall forbid a black list." I want to know what you mean? A A man being mentioned in a list which may be sent round.
2513. Q A regular system of sending a list round from mine to mine? A Quite so.
2514. Q How would you prevent one Manager from communicating with another, and giving a name? A The only way you could do it, if a man got damned to day, he may have a chance to get a job to-day, but to-morrow he may not have a chance. He might be asked, "Where were you working last?" and he would be told he had better come to-morrow. We may know the name Manager or under manager is putting on me, but you got to survive, and you are told, "We do not want any men," and you hardly go away before another man is put in. That is a good example of what I mean.
2515. Q You are talking me of what may occur,—how are you going to prevent verbal communication. You cannot prevent Managers speaking to one another? A No.
2516. Q You could not determine what they should speak about, and you would not know? A No.
2517. Q All you wish to prevent is the passing between the Mine Managers of what you call "a black list" of people understood not to be desirable employees? A Quite so.
2518. Q I see in this suggestion that action is made as to forbidding and punishing the improper promotion of discharged persons obtaining employment. That opens up the question as to proper and improper promotion,—do you think it is possible to lay down such a prohibition to Managers communicating with one another as to prevent this—in a practical way? A I think it could be done, but you would never get it down altogether.
2519. Q You could never find out what communication passed. Supposing two Managers were talking in each other in the street? A It is not often done that way, but by letter, and there is certain information known publicly which we are more likely to know how to stop unless we could take them into Court.
2520. Q Do you know that in Kentucky there is a law that prevents the passing of anything into the newspaper? A I do not know.
2521. Q I am told that it is so in Ohio,—have you thought of a practical way of doing that? A I am showing you a way to get out of the difficulty. I could prove that a letter had passed from one Manager to another in connection with getting work—then there should be some penalty.
2522. Q Supposing one Mining Manager arranges with another that, if the name of a mine is merely mentioned, it means that he ought not to be employed, then all a Manager has to do is to say, "I saw John Brown this morning,"—and that he stopped,—it is put before the Commission as a practical suggestion; but do you think it is possible to stop this thing? A Yes, I think it is possible to stop it to a certain extent, if you make it punishable; I believe there would be a remedy found out by Parliament.
2523. Q I will not be quite sure, but I think I understood you to say, with regard to the burning and stamping of the props, that they were at the back landing between Scotland Yard and Fenchurch Street,—was there any other part of the mine where you saw a similar thing? A On the way that we went down for the bodies of Morris and my boy, but I cannot describe the place.

2524. Q I would like it described.
2525. Mr. Moore: Q I think this was the first time the witness was in the mine? A Yes.
2526. Mr. Bruce Smith: Q Where did you find the other props that were burnt,—I will order you to this map? A As far as I can judge, the other place in which I saw burnt props was towards the end of No. 1. Right looking west where the Marbles were found.
2527. Q Then the first place you mentioned, the named place was the only one where you saw burnt props? A The only place that I would be in.
2528. Q As far as the 4th Left is concerned, you saw props there; but they did not appear to you to be burnt? A I did not examine them; we were clearing the steps.
2529. Mr. Moore: This witness says that he does not know whether they were burnt or not; he has no idea.
2530. Mr. Bruce Smith: I want to know whether he looked. You cannot speak as to that? A No; I was working at the time.
2531. Q You have not had much experience of judging burnt timbers, have you? A I have seen some.
2532. Q Was this burnt, up to the end of No. 1? I might want to see, and that between Scotland Yard and Fenchurch Street more or less in the same extent? A I could not notice any difference between them.
2533. Q There was no difference in the burning, to you? A Not to me, with work light as it had.

- 2024 Q You have been examined by Mr. Wade as to the extent of the lashing on Morris and me? A Yes.
- 2025 Q Upon what you saw of their backs, have you any doubt as to their being lashed? A Not the least, so far as their backs are concerned.
- 2026 Q Is it true that the hair was stirred up tonight in the result of heat, or was it actually burnt so that you could eradicate it into dust? A It was burnt into dust.
- 2027 Mr. Wade Q Do you mean that the whole of it crumbled away? A When I got it off, and it all appeared to be the same.
- 2028 Q You did not take hold of the very ends of the hair? A No, I caught hold of it with my hands.
- 2029 Mr. Justice East Q Regarding these patches of hair you saw burnt up next Morris and me's bodies, were they to the same level or heading? A I believe so. Of course I am not master of the heading.
- 2030 Q Now you told us that the roof was what you called "corked", and you described that, when you put your hands up, you got black stuck upon them, such as you got off a kettle? A Only more grumpy.
- 2031 Q Was it detached from corked, or was it the same kind of thing? A It is different.
- 2032 Q With all your experience of coal dust, being burnt, did you ever find it different? A Yes.
- 2033 Q Suppose you put your hand on ordinary old dust, has it that grumpy feeling? A It might have on certain sorts of dust, if the day happened to be so.
- 2034 Q I am asking dust on my lap, or coal? A No, it is not the same.
- 2035 Q The stuff you got off the roof had quite a distinct feeling? A Yes.
- 2036 Q You say it had a grumpy feeling? A Yes.
- 2037 Q Now, in speaking with regard to the Ball Mine, you said that "if the same precautions were taken now you have the lumps as were taken previously to your having the lamps, you think there would be no danger? A Yes.
- 2038 Q What are the precautions? A I do not think there are any at present, but I am saying that, now the lamps are in use, anything may come if the mine is not kept up to the standard that it used to be.
- 2039 Q I think you expressed that there is now a less careful state of things? A No.
- 2040 Q Have you seen any indication of a falling off in the work of, or the management of, the mine? A No, I cannot say so, or yet.
- 2041 Q Did you not say before that the roof through would be every 30 yards? A Yes.
- 2042 Q Is there any difference now? A We have no plans in the mine going ahead. We are striving to come back again.
- 2043 Q You cannot say that there is any difference? A No.
- 2044 Q Has there been any difference in the case of carrying the headings up to the face? A No.
- 2045 Q You said that, if the same precautions were taken now as were taken before the lamps were put on, there would be no danger? A Yes.
- 2046 Q Do you consider that the same care is not being taken? A No.
- 2047 Q Then, as far as your mind is concerned, you do not see any difference in the amount of care being expended? A Not during the last few months.
- 2048 Q I suppose you have some experience that, by extending lamps, there will be less care taken in the direction of gas? A That is the general feeling among the mine. They are afraid that the same precautions will not be taken to keep the mine up to the original standard of proficiency.
- 2049 Q You say that John Catell said, "Mindful, keep your light out of the rest"? A Yes.
- 2050 Q Is that all? A Yes.
- 2051 Q How do you know what he meant? A Well, of course. [Interposed.]
- 2052 Q Had anything occurred personally between you? A He might be in it one morning when a lot of the roof would be wrong. Catell would say, "Do not go in until I come with you. He might try it. Our underground manager would often do the day before. He might say, "I want to go in there, there may be gas there."
- 2053 Q Gas has been most quiet. A It may be.
- 2054 Q You said, "He would know what I mean"? A Yes.
- 2055 Q How long ago is that? A After? A Twelve months.
- 2056 Q Did Catell ever express your feeling, gas? A Yes, I heard the underground manager say so. There is a report nearly every day in the mine. Where there is gas he reports it.
- 2057 Q You said that they say something—what is it? A I do not know.
- 2058 Q I want to know whether you think the manager the deputy? A Yes, the deputy.
- 2059 Q You heard the manager say that there were gases in the presence of gas? A Yes.
- 2060 Q Frequently? A Yes.
- 2061 Q How long ago? A Eight or nine months ago or perhaps not so long.
- 2062 Q You said, "I saw the Chief Inspector say so"? A Yes.
- 2063 Q You know Mr. Atkinson by sight? A Yes.
- 2064 Q You saw him say so? A Yes.
- 2065 Q With a safety lamp, or with a hydrogen flame? A With a hydrocarbon flame.
- 2066 Q Did he say so? A I know he heard some.
- 2067 Q How do you know that? A I have talked with the Manager after work.
- 2068 Q The Manager? A The underground manager—Charles Hope.
- 2069 Q Did Hope tell you that the Chief Inspector had found gas on your head? A In the heading.
- 2070 Q Did not you say that before the lamps were put on, there were not through in intervals of 30 yards and every up to the face? A I believe that so, when they were going ahead, and that since the lamps had been put in we had been working for a while.
- 2071 Q I would intend you to say that safety lamps give nothing like the light which you had from the open lamp? A I would not.
- 2072 Q Therefore, all things being equal, you had much rather work with a naked light? A A great deal.
- 2073 Q That is, every thing being safe? A Yes.
- 2074 Q Now, you refuse the recommendation that the Inspector—the local Inspector you mean—should have the absolute power of ordering lamps into a mine? A Yes.

2002 Q Now, I want to get this one to you. Suppose you have an Inspector A man who you trust, believe what I told him, without taking the trouble to investigate. Supposing some one tells him a story about you as the man, is there not the possibility of injury to the mine itself, without you give power of investigation? A Yes.

2003 Q Do you not think that if the Inspector, after hearing and reporting, comes to the conclusion that there is danger by working with open lights, it would be the worst case in other words at once, and then give the management the opportunity of going into the question to see whether it is a true report? A In that case I believe his duty would be to go to the mine and make a thorough inspection, and then report that.

2004 Q That is another objection. You think that he might not be order them right away, but go out make an inspection? A Yes, under an inspection at once.

2005 Q I am going to put a case to you. Supposing a report came to the Inspector. Suppose he goes straight to the mine, but he forgets. What should he do then? A I suggest that he should communicate with the Manager and the miners, and have a thorough representative inspection; so that if he missed any gas it might be pointed out to him.

2006 Q If the Inspector receives information that looks him to conclude that a mine is dangerous, so long as the lamps are ordered, and in the meantime you have the matter investigated, you would be satisfied? A Yes, if there was an investigation by both sides.

2007 Q Otherwise you say that the Inspector should have power to order lamps straight away, and perhaps two or three hundred men may be compelled to work with lamps when open lights would meet the case? A Yes. I am afraid the Managers would object to lamps, if there were no danger.

2008 Q I understand that you want in a body to stop against the use of safety lamps, and that when the Manager intimated you that the Chief Inspector required them you felt it with that view at once? A Yes.

2009 Q And you withdrew the gas oil? A Yes.

2010 Q You suggested that whatever was ordered by the Chief Inspector was in the interests of all concerned? A Yes, and we withdrew the request.

2011 Q I want to know when you submitted by this 15th recommendation—it was sent it to you—"Extra supply of safety lamps and these requirements, equal to one-third of a number of persons employed below ground, so as to keep constantly in good order and ready for use." I will put a case to you. Take a mine with 300 men at work, and they have 300 lamps, do you suggest an additional hundred beyond those?

A Yes.

2012 Q Why in a case of that kind? A If we had 120 square lamps and an explosion took place, then, with all the willing hands about to rush to our assistance, and the lamps ready, the mine could be got out at once.

2013 Q If there were 300 men, and they were working in two shifts—the two shifts could be at once? A Yes, say if they were working in two shifts—the two shifts could be at once.

2014 Q What is the largest proportion which would be in use? A There might be every lamp in use, if anything happened to occur between 1 o'clock and half past 1 o'clock.

2015 Q Then for one hour and a half the whole of the lamps would be in use? A Yes.

2016 Q And if an explosion took place there would be no lamps for the men to put? A No.

2017 Q Now, taking this possibility, you suggest that a further 100 should be used? A Yes, we suggest that they should be ready for use.

2018 Q Now, take the case of a mine with 300 men where lamps are not used? A We say that a safe quantity of lamps should always be ready for use.

2019 Q You say that we have and a half is the case that all the lamps would be in use? A Yes, but it might overreach that time.

2020 Q What do you mean by keeping the lamps in good order? A I mean clean, and with wicks all ready in them.

2021 Q Not oil—would you have the oil there? A I say that in new lamps it would do if the oil was there.

2022 Q Supposing that the lamps are there, and the oil is there—how long would it take to fill each lamp? A It would take about half a minute to fill a lamp.

2023 Q Suppose you have a supply of lamps and wicks—that is all you want? A No, I want the wicks put in them, that takes the longest time.

2024 Q Now, now describing the wetting of the roads—I understand from what you say that you were running a hose along the side, and you took the plug out, and let it run on the floor? A That is for wetting the horse made.

2025 Q Is that done for the purpose of wetting the road, or for getting rid of the water? A For the purpose of wetting them.

2026 Q Have you a superabundance of water? A Sometimes we have.

2027 Q Are there made and for muddy places where water accumulates? A No. Where the water accumulates we have a tank for the purpose, like an iron cart.

2028 Q The tank is taken along for the purpose of wetting the roads? A The tank is for the horse road; and the cart is for the men's road.

2029 Q Does the water run outside the rails or between them? A The water-net is in the same as the Sydney water net. The water goes outside the rails; it has a spray.

2030 Q Have you the sides and the cart wetted? A The sides and the cart are never done. I do not think the spray runs that high.

2031 Q Then nothing but the floor is wetted? A The floor and part of the sides.

2032 Q How far up the sides? A Just according to the water that is found out.

2033 Q How much—how wide is it? A Some places 5 feet, and some 12 feet.

2034 Q What space beyond the rails? A In some cases a foot, and sometimes more.

2035 Q Is water put in between the rails? A Yes, sometimes.

2036 Q How high up does the spray get? A According to the pressure of the water.

2037 Q What would be the height—some 4 or 5 feet high? A Yes.

2038 Q Do I understand you that there is no travelling road at all in Old Main? A No.

2039 Q All the men have to go back by the roadway? A Yes.

2040 Q How many years have you been there? A Seven.

6024. Q. During that eleven years have you known a case in which the machines were inefficient? A. At one time they were, but they are more plentiful now.
6025. Q. What distance are they apart? A. From 20 to 25 yards.
6026. Q. How far apart were they before? A. I cannot tell.
6027. Q. Are they about 5 feet deep and 4 feet wide? A. Some of them are larger, and some smaller.
6028. Q. You have from 1 to 2 feet between the top and the wall? A. Yes.
6029. Q. A man might stand safely away from the slope? A. Yes.
6030. Q. Do any men go down into the machines? A. Yes.
6031. Q. Do you think in the case of Old Bull that the machines went increasing? A. I cannot say that there are more or many men together.
6032. Q. You only remember one instance where there was an accident? A. Only one instance. I do not know whether it was in front of the slope and got caught by it.
6033. Q. It was not a case of a number of men crowding into a machine, and the center man being caught by one of the steps? A. No.
6034. Q. Then, during eleven years in that mine you have not known of an instance in which the machines passed one another? A. No, because when coming up, in order to hit the machines a few of the men would jump behind.
6035. Q. And if you had travelling rods as well? A. Then we would have no trouble at all.
6036. Q. About this proposal that a deputy should, from time to time, show the men the different ways out of the mine—I understand that you want every quarter that the deputy should take a number of men, and show them the different ways out of the mine? A. Yes.
6037. Q. You say that there is a different way out from the main road? A. I know there is the return airway.
6038. Q. How is it that you do not fear that way out? A. You are not afraid, according to law, to go from your own place to another man's place.
6039. Q. And you were sick? A. I have never sick, would the last three months they would not allow you to wear a miners' survey with a wind light.
6040. Q. Now, would not the way round out of a mine depend very much on the problem in which an accident took place? A. Yes, it might.
6041. Q. This is what I mean. On the map there, there is the mine tunnelled the daylight tunnel. Now, are there not a dozen places in that mine where an accident could take place which would make it desirable for the men to go out a dozen different ways in order to avoid that accident? A. Yes.
6042. Q. Merely showing the men out one way would not be of much assistance, if the men were working and an explosion took place in a different part of the mine? A. No.
6043. Q. Suppose the men were working in No. 1 shaft, along level and had been shown the way out by the daylight heading on the north side of the mine; that would not be of much use to men working near the daylight end to the west of the shaft, interior, if an accident took place near them? A. It might not be, but it would be possible for an explosion to take place in a part of the mine where they could get out at the daylight heading.
6044. Q. Is it not possible to have an explosion in a dozen different places which would require the men to get out at a dozen different places? I mean that such explosion would require that men to get out of the mine by a different way? A. Yes.
6045. Q. Would it be possible for the deputy to instruct the men in one or two ways of getting out of the mine, and for the men to try to get out by those ways to run themselves into danger? A. It is possible.
6046. Q. Is it not possible that, unless the men were instructed in every possible way, how to get round a difficulty, they might get in a way that they had been instructed in and run into danger? A. It is possible.
6047. Q. Then that proposition would want a good deal of thinking about? A. Yes.
6048. Q. And in this case a deputy would have to instruct the men—of an explosion took place here, you get out by such and such an explosion took place there, you would get out by such and such; and they would have to be fully informed of how to reach all the different corners of the mine? A. If every quarter, when the men were shifted from one division to another, they could be given instruction, they would not get to know every machine in the mine.
6049. Q. The men are always being shifted about the mine? A. Yes.
6050. Q. Let me see how many miners have you here? A. A good few.
6051. Q. You talk as if about fifteen? A. Yes.
6052. Q. Is about twenty years mining? A. Yes.
6053. Q. You have been in fifteen mines? A. Yes.
6054. Q. You have been a wanderer? A. Yes.
6055. Q. Now about Dryden's case. You say you know of other cases, but do not care to mention the names of the men? A. No.
6056. Q. Without going into the names at all, do you know of any case in which you think is satisfied that men were kept out of employment by managers passing from Manager to Manager, so that a mere matter of compliance? A. No, we had proof of it, but I am not going into it. I am satisfied in my own mind that it has been done.
6057. Q. Can you tell me the reason why? A. I will give you a solid reason. It is because they took the leading parts in different things in connection with Unions, and because they spoke when the other party was against them to my seeking.
6058. Q. They were good talkers? A. Yes.
6059. Q. Was that the only reason? A. Yes, I believe the Managers told them so—that if they would keep their tongues quiet it would be better for them.
6060. Q. Were they men who expended a sort of skillful between the men and the men? A. No, the men I mean were most opposed to that—they were men who would keep that kind of thing down.
6061. Q. What was Dryden's strong point? A. Dryden was taking leading parts and speaking strong.
6062. Q. What was his name by way of? A. By saying three what he thought.
6063. Q. What is his? A. That is how men get themselves killed, by telling the truth.
6064. Q. Was it such capital sort of talk? A. About the Union—saying what the men ought to do.
6065. Q. Were there other cases that you know of? A. I did not say so.
6066. Q. In Dryden at Old Bull mine? A. Yes.
6067. Q. He is quiet now? A. He has not taken any leading part now at all.

Q How long has this case that you speak of been continued in Old Bath since not letting men in the street? A Since I have been there, I think since the explosion.

Q That is since you left the explosion—when you left your job? A Yes.

Q I think I asked you if you knew whether Hays, the under-manager, reported gas from these lamps? A Yes, I believe he did.

Q You say you saw it in the book? A No, I did not say that I saw it in the book.

Q You said that the witness told you that they saw it in the book? A Yes.

Q I would like to ask you your opinion as to why the check reporting is not more thought of. What is your explanation as to that? A The check reporting—[Interposed.]

Q I mean the right of the men to make the check reporting from time to time. What is the reason they do not do it? A We do not feel ourselves so to it, and so that we have not got really competent men to do the work. The men would not be able to explain matters to a Court. Perhaps they might be afraid if the machine was correct, and they could not swear whether it was correct or not.

Q Do you mean the men for mentioning the air? A Yes.

Q Do you mean to say that you have not seen that you have confidence in who could do this work? A We have lots of men, but they are looking for posts under the Colliery Managers, and take good care they will not do the work.

Q Suppose the inspection is right, what is there to be afraid of in it? A It is seldom that a man can go round and not find fault somewhere.

Q There there is an impression that any man who undertakes this work may have to report things which will render them unpopular? A Yes.

Q You said something about a man going into Court? A If he were wanted to prove something he might have to go there.

Re-examined by Mr. Loughton—

Q You said that Managers told men to keep their tongues quiet, and they would be better off? A Yes.

Q Can you tell me any names? A I told you before that I am not going to give any names.

Examined by Mr. Robertson—

Q You know that after the explosion at Bath the mine was worked with safety lamps? A I have only been there about eleven years, and the mine was under Manager Evans.

Q Has not the mine been worked eleven years with safety lamps? A I cannot say how long before I went there.

Q Did you hear whether the miners objected to the safety lamps being withdrawn? A I cannot say I did.

Q In the light of what occurred in the explosion at Bath, do you think it was an improper decision to withdraw the safety lamps? A I do not understand.

Q In the light of what occurred at Bath—there must be gas there—you described it—did it not occur to you that it was an improper decision to withdraw the lamps from the mine? A No, not if it could be proved that the mine was properly airtight, and that there was sufficient air to carry away the gas without allowing it to accumulate.

Q That is under the normal conditions of a mine, but accidents happen—doors are left open, latches may be knocked down—you have to provide against contingencies? A Yes, in case of that kind it is right to have lamps.

Q You said that you would only put in safety lamps, where gas was given off, if the ventilation could not be improved? A Quite so.

Q And I go on to say that you think that safety lamps are constructed for the purpose of working in gas? A If I mean to say so, if there is a sufficient amount of air to allow so gas to show up by a working lamp, there is sufficient air to carry the gas away, and then the mine could be worked with a naked light.

Q If there is not sufficient air, you have the safety lamp? A Yes.

Q That is not proved thirty or forty years ago, I think they have had a better knowledge of the use of safety lamps than a day, I think a safety lamp is only wanted to provide for contingencies or accidents which may occur in the best regulated mine. However, you are of opinion that a safety lamp is wanted to work in gas? A Yes, it was intended to work in gas.

Q I am sorry you have that opinion? A That is my opinion of the safety lamp.

Q Now, do you positively assert that a block fire is in existence in this district? A I do.

Q Can you give me any proof of it? A There has been proof enough in the district.

Q Can you give me any proof? You said something about something being done by letter? A Yes.

Q The you know of any letters that have passed? A If I say so, you will not ask me for the proof.

Q Yes? A I am not going to prove it. For that reason, I will not say I do.

Q I have been long in the district since you have, and I know of no such thing. I feel aggrieved, and I think you should give proof. You appear to know more than I do, and I do not think you should make charges unless you are in a position to prove them? A There is one man's name that I give you, and you can tell him before the Court, and he will give you proof.

Q Who is that? A Dryden, and I believe there is another—Mr. Birds.

Q Mr. Birds was employed by me and there is no block fire there? Mr. Dryden was not employed by me, although he is dead, but there is no block fire there? A Yes.

Q You know there have been hundreds of inspections by workmen throughout the district? A Yes.

Q Did you ever hear anyone talk because he had made such an inspection? A I have heard tell of them. Nothing has occurred at my own mine.

Q Can you give me any specific instance of any person who has refused to the slightest extent, because of having told in the capacity of check reporter? A I know lots of men who would do the work, but they will not take it, and that is the reason they give.

Q You say that you cannot convince men to do the work? A We have men who could do it—just Managers, but they will not do it as they are now.

Q You cannot give me any specific instance of anyone who has refused doing all these years? A No.

Examined by Mr. Bishop:—

- Q108. Q You say that Greff told you to keep your light out of the cell? A Yes.
- Q109. Q You distribute shot to men that there was got shot? A Yes.
- Q110. Q Was the first one up on the corner? A Yes pretty well up.
- Q111. Q What else were taken to get rid of the gun? A You hang the long body, and the wing of the pick and your arm was sufficient to end that little set.
- Q112. Q The windmill was not blowing on the face of the road? A Yes, but there might be a little gust on the corner.
- Q113. Q Did the deputy take steps to secure it? A Yes, I did myself.
- Q114. Q Did the deputy trust to you to take these things? A Yes.
- Q115. Q Did the men come out to go with you to remove it? A No.
- Q116. Q In what way did they hold the stoppage? A There were light with brick, and others with stone and dirt.
- Q117. Q In what way? A They would build it up with stone, and Greff and one of the rest through would be open through the building.
- Q118. Q I think you told Mr. Bruce Smith, with regard to the extra supply of lamps, that all the miners would be employed for about an hour and a half? A It might be more.
- Q119. Q How many have you working on a night shift at Delhi? A I think eighteen or twenty.
- Q120. Q How many on the day shift? A, I think on the last day we had thirty six.
- Q121. Q Only thirty-six on the day shift? A I do not think there would be many more, that is the Mt. Kent District.
- Q122. Q Is anything of the solihary generally? A I think it would be fifty or sixty—perhaps about forty.
- Q123. Q How many solihary shift men, and women, could be employed altogether—would there be 120? A No, I do not think more than eighty or sixty.
- Q124. Q At all events, two-thirds of the lamps would be employed—eight hours would be a day's shift in the mine? A The women are there longer.
- Q125. Q That is the case of this solihary no lamps would be employed for six hours during the day? A Yes.
- Q126. Q How often does the deputy visit your place? A Once in the morning, and he comes afterwards.
- Q127. Q Does he come round every day? A Yes.
- Q128. Q Does he examine a second time? A Only when he thinks there is something wrong.
- Q129. Q He would examine again if he thought there was anything wrong there? A Yes.
- Q130. Q Does he tell you that he knows of it? A No.
- Q131. Q Did you ever notice anything different on the face on the occasion of the second examination? A I know he is more particular.
- Q132. Q Have you any knowledge of them being anything different in the face? A I know that there were flowers in it, but unless you put a candle light there you would not exactly know.
- Q133. Q Spending generally how does he make an examination of the face? A In the morning before you go.
- Q134. Q You know nothing about that? A Well, once a day, when he happens to be coming back the same road—at a general rule, say, once a day.
- Q135. Q You tell us that sometimes he makes no examination at all? A We say go for meals and not make any examination while you are there.
- Q136. Q He simply comes and when you hear you are going on, whether there is anything wrong, whether you have plenty of timber? A Yes.
- Q137. Q How often have you seen the District Inspector during your time? A Twice in the main building during our quarrel, and once when working up a lead bit quarter. I think that I saw the Chief Inspector four times.
- Q138. Q I mean the District Inspector? A I have seen Mr. Watson about three times. He has been there more often, but I have not seen him.
- Q139. Q Within what period? A Within the period of not being there.
- Q140. Q About when? A When the Mount Kent is exploded.
- Q141. Q Prior to that, did you have a man from the Lord Inspector? A I saw Mr. Bruce Smith twice.
- Q142. Q Did the Inspector make any comment on it? A In some places. We took it that, if they made an inspection at one place and not at another, they saw something before they came there.
- Q143. Q You took it that unless they saw something in the hole they would not say? A I have been in places where the Inspector has been, and in some places there he has not been.
- Q144. Q You think because of that he must have seen something in the hole? A Yes.
- Q145. Q Have you any further reason to think that? A No.
- Q146. Q Does the underground manager look the gun? A The underground manager does.
- Q147. Q Have you ever seen the Manager there? A Not in my knowledge. I have heard tell of his being in the mine, but I have never seen him making any examination.

Mr. ROBERT WEDD was sworn and examined as under:—

Examination in chief by Mr. Lynght:—

- Q148. Q What is your name? A Robert Wedd.
- Q149. Q What are you? A A miner working in the Mount Kent District Colliery.
- Q150. Q What is the extent of your mining experience? A That on twenty days, years now.
- Q151. Q Where have you worked? A In Northern Ireland, England, and in the New.
- Q152. Q What mine have you worked in in England? A At the Cleveland Colliery, at the Bramhall Colliery, at the Southwell Colliery, and at Claxton and South Hall, and also Mount Pleasant Colliery, at the Southwell Colliery, and at Claxton and South Hall.
- Q153. Q How long have you been in Mount Kent District? A About four years, I think.
- Q154. Q Did you go to Kentucky at the time of the disaster? A Yes.
- Q155. Q What time did you reach there? A About 4 o'clock.
- Q156. Q Do you know anything about the supply of safety lamps? A There were very few lamps, as far as I know.

Witness—R. Hunt, 11 January, 1909.

- 6155 Q What was your experience? A When we went there they were going in with naked lights. They could not find safety lamps.
- 6156 Q Did you look for any? A Yes.
- 6157 Q What was the result? A I could not find any.
- 6158 Q Where did you look—in the lamp-cabin? A I went to where there was a safety. I carried a new one, but they could not find the oil for them.
- 6159 Q Do you know where they were looking for them? A They were looking for oil and lamp-oil.
- 6160 Q They used a key to find lamp-oil.
- 6161 Q Do you mean to a shop to buy it? A Yes.
- 6162 Q Had there been an adequate supply of safety lamps, do you think more lives might have been saved? A I think so.
- 6163 Q Were the lamps that were there in good condition? A They were in bad condition. One I had would not burn at all.
- 6164 Q Did you get it out of the safety? A It was one of the old-fashioned Davy lamps.
- 6165 Q How long was it before a good supply of lamps could be got to give them to the miners? A It would have been over an hour.
- 6166 Q What is the absence of lamps that prevented the miners going in before? A Wood was left in the tunnel north that no one was to go in with a naked light.
- 6167 Q Was it the absence of lamps that delayed the party going in? A According to what I could see.
- 6168 Q What part of the mine did you go into? A I never went into any part.
- 6169 Q Did you go any subsequent day? A No.
- 6170 Q You do not know anything about the disaster? A No.
- 6171 Q Are you a competent delegate? A Yes.
- 6172 Q Now, with regard to those recommendations—(7) "That Managers, under-managers, and shot-fires should hold certificates of competency by examination?" A I believe so that.
- 6173 Q Do you offer any reasons? A I believe that the Coal Mines Regulations should be carried out. The Act says that a man should be competent before he takes a position as Manager.
- 6174 Q What about deputies and shot-fires? A I consider that the deputy holds a responsible position, and that he should be competent to report the place thoroughly every morning.
- 6175 Q Who is deputy at present at Mount Pleasant? A At present we have three deputies—Mr. People, Mr. Rhodes, and Mr. Murphy.
- 6176 Q Do you know whether they hold certificates? A I cannot tell.
- 6177 Q Who are the shot-fires? A We have none.
- 6178 Q Who fires the shots? A The miners.
- 6179 Q Is there any suspicion? A Not that I am aware of.
- 6180 Q What sort of lamps do you use? A Flare lamps, and in the pillars they have safety lamps.
- 6181 Q Do you know why? A As far as I understand, for protection.
- 6182 Q From what? A From gas, or something of that kind.
- 6183 Q Is gas known to be there? A It has been reported on Mount Pleasant.
- 6184 Q Have you seen it? A Yes.
- 6185 Q How long ago? A I have seen it in every colliery I have worked in. I saw it last quarter.
- 6186 Q Were you working with a naked light? A Yes.
- 6187 Q Did you report it? A No.
- 6188 Q Did it light? A Just lit up a little.
- 6189 Q Was the deputy there? A No.
- 6190 Q Where did you see it before that? A The quarter before that.
- 6191 Q Did you report it? A No; I never reported gas.
- 6192 Q Was there not enough for you to report it? A I did not think there was sufficient to report it.
- 6193 Q Do you know whether gas has been reported on Mount Pleasant? A If I am not mistaken, it has been reported by the Government Inspector. I read it in the Annual Report.
- 6194 Q What regulations have you? A No.
- 6195 Q When was that put in? A At the beginning of the year, I think about twelve months ago.
- 6196 Q Before that was the ventilation on Mount Pleasant good? A Not so good as at the present time.
- 6197 Q Have you known the ventilation to be returned before the fire was put in? A It never seems to me expensive.
- 6198 Q Now, with regard to Recommendation No. 5—"Inspectors to be vested with absolute powers to order the use of safety lamps?" A I think the Inspector should have that power. For, when he finds out that it is necessary in order for the Manager to use safety lamps, there is something strange about it. The Manager should find it out before then.
- 6199 Q Do you think that safety lamps ought to be used in every part of Mount Pleasant? A I think that some parts of Mount Pleasant can be worked with a naked light.
- 6200 Q Do you know of any mine where the Inspector suggested the use of safety lamps, and the Manager refused to put them in? A I have read it in the Annual Report this year. I only know what I have read.
- 6201 Q With regard to ventilation—No. 2—"Ventilation by means of fans, and fans substituted?" A I think the fans are a better means of ventilation.
- 6202 Q No. 4—"Where workings to be completely sealed off and surrounded by return airways, such workings not to be made in contact with the intake?" A I approve of that, as far as I can see. It is a thing that should be done.
- 6203 Q No. 5—"All pillars, except prospecting drives, to have cut-throats not more than 30 yards apart?" A I approve of that.
- 6204 Q What is the average distance they are apart in Mount Pleasant? A I cannot tell you the average distance. I think there are some considerably over 30 yards.
- 6205 Q What is the longest distance? A I could not tell you exactly. I never made any measurements in that respect.
- 6206 Q In your opinion, would cut-throats 30 yards apart in all workings do the work? A I do not think so.

4205. Q To those long drives in Mount Pleasant give proper ventilation at the time? A In some of them the ventilation is very weak.
4206. Q You have noticed that? A Yes.
4207. Q Have you noticed it when the fan was put up? A Yes; I noticed it last quarter.
4208. Q Was the breathing room up to the fan? A Early close up, sometimes 4 or 5 yards back, sometimes closer.
4209. Q You say that the air has been delivered? A Yes.
4210. Q If such delivery was put every 30 yards, do you think that would improve the ventilation? A In my opinion it would do so.
4211. Q Did you ask for that arrangement to be put in? A No.
4212. Q I will pass over No. 8. But now we come to No. 10—Monday commutation and reporting departs and District Inspector with the hydrogen fans? A I think that is quite necessary—the mine recently ought to be inspected properly from time to time.
4213. Q I will not enter into Nos. 8, 9, and 10; now, with regard to No. 11—Weekly measurement of air in each section, and report thereof sent to Inspector? Do you know how your measurement is taken at Mount Pleasant? A I have never seen it measured at any time.
4214. Q Do you think the ventilation would materially assist in the safety of the mine? A I should say that it would.
4215. Q Where would you take the measurements? A At the main intake.
4216. Q Any last also they take it at the main intake now? A On the return airways.
4217. Q Any where else? A You can take it at the face if you like.
4218. Q Is the measurement of the air at the intake any indication of what air there is at the face? A If you have a lot of air coming into the main tunnel, you expect to get it at the face.
4219. Q What if the balance gets disturbed? A You cannot tell then.
4220. Q Have you ever known of the balance getting disturbed? A Yes.
4221. Q Is it a common thing? A I have seen it.
4222. Q I have already dealt with No. 11, referring to safety lamps, and I will now ask you about No. 12—Traveling and baggage trains, and other places necessary to be properly vented? What is your impression? A We water the travelling road. It is the main engine place. They have a water cart with a spray.
4223. Q How long have they had it? A Between six and eight months.
4224. Q Before the Kynthe disaster? A I think it was before then.
4225. Q Do they water the roof at all? A I never saw them water the roof.
4226. Q You said it? A Just a little of the roof.
4227. Q You have not any independent travelling road there? A I have never seen any.
4228. Q There is a recommendation, No. 13—that "No person be compelled to give more personal time and attention in the management of the colliery"? Have when have you seen the Manager at Mount Pleasant? A A great many times. He is often there. Sometimes I have seen him three or four times a week.
4229. Q Now, regarding No. 14—that "the use of the machines be enlarged"? A I think the machines should be enlarged.
4230. Q Are they too small? A I think so.
4231. Q Have you known of any accidents on the baggage road? A I have not heard of any.
4232. Q Have you not known of men over the men had to crash into the machine? A Sometimes it might happen that four or five men come all at once, and then you have to crash into the place.
4233. Q You imagine that they appear to be too small? A Yes.
4234. Q What is the size of them? A I cannot tell you exactly. They may be 4 feet wide, but they go to anywhere at the back. I think they are about 4 feet from the front.
4235. Q There is a recommendation, No. 15—that "Instructions be given to employees regularly on the nature of escape"? What about that? A I only know one way—the way I go in.
4236. Q You know of no other? Cannot you go out by the return air way? A I have never been out by the return airway.
4237. Q You never heard of any other way out? A No.
4238. Q In case of accident you would have to go down the main baggage road? A As far as I know, I should have to do so.
4239. Q Have you ever asked any one to show you other ways out? A I have not. I think it has been suggested by one of the Judges that the mine ought to be connected on the different ways out of the mine.
4240. Q Were was the suggestion made? A Six months ago.
4241. Q Before the Mount Kynthe disaster? A Yes.
4242. Q The men asked that they should be instructed? A Yes.
4243. Q Have they been instructed? A I have not been.
4244. Q Who would give you that instruction? A The mine manager or the deputy.
4245. Q When? A At the change of each quarter. When the men were down, any man who did not know should be instructed in any road in that portion of the mine which he would work in.
4246. Q Recommendation No. 16 is—"The Coal Mines Act to include a check list of employees being kept, and providing for proper provision of discharged persons obtaining employment"? What do you wish to say about that? A I cannot say much. If there is a check list, I do not think it should be kept.
4247. Q Do you know whether one is kept? A We all have a suggestion, it is kept. That is all we have got.
4248. Q Do you know of any person who has ever been prevented from getting employment? A I could not swear to that.
4249. Q Have you ever heard of any? A I heard that Gordon was. He was at one time President of the Throver Association. I only heard it.
4250. Q In your opinion would the provision forbidding a black list and forbidding Managers improperly refusing employment, conduce to the safety of the mine? A I suppose of the recommendation.
4251. Q Why did you not report the gas you discovered? A A man does not suit to be messing about reporting these little bits of things.
4252. Q Why? A Because he would get the sack.
4253. Q Do you think so? A I had a suspicion that I would.

- Q234 Q No 10 recommends that "safety lumps should not be collected for anything." Do you place it in diagrams to safety stores? A If safety lumps are being used I would not collect them.
Q235 Q How do you light the shots at Mount Pleasant? A With a lamp—with a red light.
Q236 Q Is there anything else you want to say anything of it about? A Not that I know of.

Cross-examined by Mr. Wells —

- Q237 Q How long have you been a delegate? A I think about eighteen months.
Q238 Q Is it part of your duty to tell the Manager of the mine about things that ought to be looked into?
A Part of my duty — [Interposed].
Q239 Q Yes, as a delegate? A Not as a delegate.
Q240 Q What is your duty as a delegate? A My duty to the Delegate Board is to discuss anything the Lodge may need forward to be discussed.
Q241 Q Have you anything to do with the mine Manager—making suggestions to him? A Yes, when there is a dispute.
Q242 Q Have you gone to your Manager on disputes from your lodge? A Yes.
Q243 Q Frequently? A On several occasions.
Q244 Q Commented in any way with the mine's work? A No.
Q245 Q Then, with reference to what? A About different places and the like of that.
Q246 Q Complaints by miners? A Yes.
Q247 Q Have you been dismissed? A When I was a boy.
Q248 Q Do not go back into mine's history. Have you been dismissed for carrying complaints to the Manager? A No.
Q249 Q Have you been punished in any way? A No.
Q250 Q Have you made complaints on your own account apart from the lodge? A No.
Q251 Q Have you had cause of complaint? A I have had once, but I never complained.
Q252 Q So far as you are concerned, you have been none the worse because of carrying complaints? A I never stated any.
Q253 Q You had something about it not placed? A I never stated any on my own account, they were for the lodge.
Q254 Q You are none the worse for having taken complaints on behalf of the miners? A I am not.
Q255 Q Do you know of any man in Mount Pleasant who has suffered because he has made complaints? A No.
Q256 Q Your idea is in a black list is dangerous? A Yes.
Q257 Q You have no ones that you know of? A No.
Q258 Q How far back in general history have we to go in the case of Coulson? A In 1895 or 1896.
Q259 Q What because of him? A He in the Manager was at a workers' club at Edinburgh.
Q260 Q While do you mean? A I do not know. You know what a club is.
Q261 Q It was a club, unfortunately, a place for unlicensed drinking? A Some people say so, but I do not think so.
Q262 Q Where was he dismissed from? A From Edinburgh, I think.
Q263 Q On account of his being President of the Union? A I do not know whether he was President.
Q264 Q What Earl? A For taking a mine promoter's part in one of the Miners' Lodges, but what it was I cannot tell you. That is all I can tell you.
Q265 Q You know that he was an officer of the Miners' Lodge when he was dismissed? A Yes.
Q266 Q How you speak among rules at Mount Pleasant? A Yes.
Q267 Q You know a rule about reporting gas? A I think there is some rule about it.
Q268 Q Are you not sure? If you are not sure, you had better say so? A I do not know the rule.
Q269 Q Have you never heard of that rule? A I may have heard of it, but I have not got it at my finger's end.
Q270 Q Do you know about any rule for reporting gas if you find it? A I do not.
Q271 Q Do you know that you are supposed to study the rules? A I am supposed to do a lot of things which I do not do.
Q272 Q Can you tell the Court whether there is a special rule about reporting gas? A I cannot tell you.
Q273 Q You have no idea? A No, if I read it I have forgotten it.
Q274 Q Is there any rule about reporting danger to the mine? A I think so, one someone. I reported about a broken.
Q275 Q Is there any rule about reporting danger? A There is a rule that if any man finds his place unsafe he sends for the Miners' and reports it. But there is not a rule about gas, that I know of.
Q276 Q Do you not think that gas would make your place unsafe? A Yes.
Q277 Q You are not bound to report gas? A I suppose so. According to the way you report it. I would not get a chance of reporting it if it went off, I would report on the way you report it.
Q278 Q You cannot tell how much gas is dangerous, and how much would blow you up? A No, a miner cannot tell.
Q279 Q You are to report it, large or small? A Yes.
Q280 Q Why did you not report it? A I do not report little bits of blow-up.
Q281 Q They are dangerous? A I did not say they are dangerous.
Q282 Q You may have only a small light this moment, and an explosion a moment afterwards? A I think that is a small bit, say, say, say, that you would see a little light that and a big one afterwards.
Q283 Q You think it is worth making? A We did it. We have a suspicion that it is a dangerous thing, as far as gas is concerned, we may get the "sack". There is a certain amount of suspicion about it.
Q284 Q Not during all your years, you never found that someone verified? A I never found it verified, because I never reported it.
Q285 Q Do you know whether it is a common thing to find gas there? A Yes, my son find it every day sometimes. I have seen it on occasion.
Q286 Q In different parts of the mine? A Yes.
Q287 Q Are you on friendly terms with the deputy? A I am on friendly terms with the Manager, as far as I know of.
Q288 Q The deputy comes to your place every day? A Yes.

4300. Q And you did not bother to tell him about the gas? A Yes, the people reason that I could not make a position of repeating these things.
- 4310 Q Is that all the reason you can give? A Yes.
- 4315 Q Whether it is a large amount or a small amount? A If it were a large amount it would report me.
- 4320 Q If it were a large amount, and you did not report me, would you report it? A If it were a large amount, I should not report it. I should think it would need no doing.
- 4325 Q Your promise is to write me a part of one g + 1. A My promise is to make no report on gas.
- 4334 Q Are you going to write me that promise? A As far as I know, I will.
- 4335 Q Will you find gas, you will not report it? A It depends on circumstances.
- 4340 Mr. *Pease* asks: I did not think we discussed such the witness' conduct.
- 4345 Mr. *Wain*: I do not know that we have anything to do with what Mr. *Wain* wants to do. He is only expressing an opinion on three matters, and those opinions have been expressed before.
- 4348 Mr. *Wain*: I wanted to know what he was to do with the matter of a float test, and whether the objection is a lawful one or not.
- 4350 Mr. *Wain*: I understood the witness to say that it gives very little lapwood samples. They put two and two together, and they arrive at a conclusion. They may be mistaken, or they may not.
- 4355 Mr. *Wain*: Q. Each report is in log notes on the same road. The findings made in the engine road as Mount Pleasant? A Yes.
- 4361 Q Is that the road you traveled on, to and from work? A Yes.
- 4370 Q Do you go on that road, up? A Yes.
- 4375 Q That is the road you travel? A Yes.
- 4384 Q How far out? A Somewhere near a mile from the mouth to the bank.
- 4385 Q How far does the engine run in—out up to the bar? A It is not far away from the bar to the main landing.
- 4390 Q For all that distance it is watered? A Yes.

[The Commission at 1:15 adjourned until 10 o'clock the following morning.]

WEDNESDAY, 31 JANUARY, 1933

[The Commission met at the Court House, following.]

Present—

C. E. B. MURRAY, Esq., D.C.J. (PRESIDENT)

D. A. W. ROBERTSON, Esq., Commissioner. D. DITCHIE, Esq., Commissioner.

Mr. Bruce Smith, Barrister at Law, associated by Mr. Wain, Crown Solicitor's Office, appeared on behalf of the Crown.

Mr. A. A. Allison, Chief Inspector of Fisheries, visited Mr. Bruce Smith.

- Mr. A. A. Allison, appeared on behalf of—
 (a) the representative of eleven fishermen, whereby, by [repeal of the evidence],
 (b) the representative of the Mount Pleasant Colliery (miners, whereby, by [repeal of the evidence]), and
 (c) the Mount Pleasant Colliery (by [repeal of the evidence]).

Mr. C. G. Wain, Barrister at Law, instructed by Mr. T. Curran, appeared on behalf of the Mount Pleasant Coal and Oil Company (Proprietors of Mount Pleasant Mine).

Mr. J. Gaskin, Secretary to the Commission, was present to take shorthand notes of the evidence and prepare the report.

4397. Mr. *Allegro*: I received the letter from John A. Wain, who is per 4397 of the evidence and that on a Friday night a deputy did not receive his place. He wishes to correct it, now to Monday night, the 22nd of January. I bring this letter to the Commission in order that the correction may be made in the evidence, if Your Honor think fit.

4400 Mr. *Wain*: There is no objection to that being done, it seems to be a trifling matter. It is clearly an error.

4405 (Mr. *Allegro* then handed on the letter on which Mr. *Wain* states that he had after careful consideration, that he had not seen the deputy in his working place. The letter was put in and marked Exhibit No. 14, and the evidence of Mr. *Wain* was shared as requested.)

Mr. ROBERT SPOTT, previously sworn, was further examined, as under—

Cross-examination by Mr. Wain—

- 4406 Q Do you know anything about the responses to Chief Inspector on an Mount Pleasant Colliery? A Well, I see their reports.
- 4410 Q How often do you see them? A I think I have not seen it Mount Pleasant Colliery.
- 4415 Q When was the last? A About, it might be, three months ago.
- 4420 Q And the one before that? A It must have been over twelve months. I think there have been two responses in about eighteen months by check responses.
- 4425 Q Did the mine men send it to—perhaps each time? A I think there was one man from Helms bank, and one of our local men from F.C.
- 4430 Q And the last time? A Young and Wain.
- 4435 Q Are they both Mount Pleasant men? A Yes, the last two responses were made by both Mount Pleasant men.
- 4440 Q Is Young the clerk-weighman? A No, not now. He is a miner.
- 4445 Q He was clerk-weighman? A Yes, he was at that time.

Witness—E. West, 21 January, 1905.

- Q108. Q Are they both good men? A They must have been good men to get the job, I suppose, as far as I know.
- Q109. Q But I suppose the miners elected them; the Lodge? A Yes, the miners elected them from the Lodge.
- Q110. Q As far as you know from their reports, was it a thorough inspection of the mine? A According to my report it was a thorough inspection.
- Q111. Mr. Lyndall: Does not Your Honor think that the profession of these reports would be better than the solemn rendering of their contents?
- Q112. Mr. Wade: Yes.
- Q113. Mr. Moore: The question on the reports are really not for the purpose of ascertaining their contents, but for the purpose of ascertaining how those check reports are conducted generally.
- Q114. Mr. Wade: Yes; whether they are made, and how they are made.
- Q115. Q Have you got those reports? A I do not know whether the local secretary has the reports or not, but I believe they are sent to the district, in that they have to hand a report in to the management of the colliery.
- Q116. Q But have you got a duplicate? A I have not, not in my possession.
- Q117. Q But the Lodge? A I could not tell you that either. I think they have one copy in the management, and the other they have.
- Q118. Q The Miners' Lodge keeps it? A I think that is the way of it.
- Q119. Q Young is a man of experience, is he not? A Yes.
- Q120. Q How long has he been at Mount Pleasant? A I think he has been there all his life.
- Q121. Q Is he a man that you can rely upon? A As far as I know.
- Q122. Q And the other man, Woods? A He is just something similar.
- Q123. Q A man you can rely upon? A Yes.
- Q124. Q And did not you choose those two men to make the inspection in consequence of the disaster at Mount Kembla? A No, I think the men made that inspection before Mount Kembla.
- Q125. Q You said three months ago? A Well, I may be wrong as far as the date is concerned, but I think that inspection was made before Mount Kembla. I could not swear it was so, but I think it was.
- Q126. Q Do these men take a safety lamp down with them? A Yes, they have two.
- Q127. Q One for each inspector? A Yes.
- Q128. Q And do they examine the air? A Yes; they examine the air, I believe.
- Q129. Q Have they got a notebook? A Yes.
- Q130. Q Does that belong to the Lodge? A It belongs to the district.
- Q131. Q What do you mean by the district—do you mean that it belongs to the Miners' Association? A Yes.
- Q132. Q And it is available for any Lodge that wants it? A Yes.
- Q133. Q Now, with regard to these waste workings, I want to know what your own proposal, your idea is. You say you would avoid certain waste waste workings, and you said, "Yes," you explained it. Now, I want to know what it is that you do propose or that you require of? A The waste workings should either be thoroughly ventilated or sealed off.
- Q134. Q You were not asked about ventilating; you were asked if they should be sealed off? A Because you must ventilate thoroughly ventilating them.
- Q135. Q You would, less of all, get them ventilated, if you could? A Yes.
- Q136. Q And if that is not practicable, then you would consider the question of sealing off? A Yes.
- Q137. Q I suppose you would make every endeavor to have the ventilation carried through, first of all? A Yes. I think it is the safest way to have thorough ventilation.
- Q138. Q Have you got any waste workings at Mount Pleasant? A I have never made an inspection. There must be some waste workings, but I have never gone down inspecting the mine.
- Q139. Q Have they taken any pillars out there? A Yes, they have taken some out there.
- Q140. Q Now, as regard to the Miners' visiting the underground workings, do you know how Mount Pleasant compares with Mount Kembla for size? A I do not know. I was never in Mount Kembla.
- Q141. Q How many men are employed at Mount Pleasant at present? A I think about 180 men.
- Q142. Q Do you know what number they employed at Mount Kembla before the disaster,—near 300 men? A I think it was.
- Q143. Q About 300? A Something like that.
- Q144. Q Have you had any experience of working in deep mines? A Not extra deep.
- Q145. Q What is the deepest you have been in? A About 150 fathoms, I think.
- Q146. Q Was that in England? A Yes.
- Q147. Q What size of pillars do they have there? A Twelve feet pillars—thirteen.
- Q148. Q Square, or what? A That is the ordinary pillar, that is where they are working their heads and headings 15 yards thick.
- Q149. Q Twelve yards along the heading? A Twelve yards between the heads.
- Q150. Q And how far do they run? A About 15 yards.
- Q151. Q And when was that? A When I left there; that was in 1887.
- Q152. Q You say there are some pillars in Mount Pleasant where there is a distance of more than 20 yards between the pillars? A I never measured them. I could not swear. In those levels the workings are between 60 and 70 yards apart.
- Q153. Q That is between the head and butt? A No; from heading to heading.
- Q154. Q Take the headings themselves; how far apart are the cut-throats in the headings? A I could not swear. I did not measure.
- Q155. Q About how far? A Some might be 45 yards, and some might be a little less, and some might be more.
- Q156. Q You mentioned 60 yards apart now? A I used the distance between cross cuts from one cross cut to the other would be between 60 and 70 yards in some cases.
- Q157. Q And in some cases you have a distance of 60 or 70 yards without a heading or cross-cutting between? A Yes, there must be.
- Q158. Q How is the ventilation carried through? A With leasings.

- Q And that is the way you worked when you had a furnace at Mount Pleasant? A Yes.
- Q Did you have any trouble through having those long distances, 40 and 50 yards without a cut through? A We considered — [interrupted]
- Q It is not what you considered — did you ever have any trouble? A The air was not as good as it ought to be, we always thought so in a good many instances.
- Q Were you at Mount Pleasant before the general trial mine Act came into force in 1894? A No, I do not think I was.
- Q Where were you then? A I think I was at North Belle Glen.
- Q My North Belle? The Act came into force in 1895.
- Q Where? I think I was at Cleveland (Ohio) at that time.
- Q My work? Q Do you consider how far cut through were put in those days? A Just about the same. No, I think it was 50 yards at that time.
- Q And that would be without level? A Yes; they were without level.
- Q You could work out through 35 yards apart, and you were not bound to use level at all? A Yes.
- Q Did they have them longer than 50 yards apart in those days? A I could not tell you. I never noticed.
- Q But now a days they are levelled whether cut through are 25 yards apart or more? A Whether they are more or less they use level.
- Q They all use it, do they not? A Yes, they all use it.
- Q How long have the present day deputies been employed in those positions that you know of? A As far as I know, one of them, who is there must have been there three, four, or ten years. He has been, off and on for the same length of time — perhaps more.
- Q And the night deputy? A He has been on since about two or three years, as far as I can recollect.
- Q And you told yesterday that the deputies should have practical experience of the way to inspect a place? A Yes.
- Q Then is not the experience you gain from working every day in the mine, the best experience you can have? A There are a lot of things a man can learn from going in there — [interrupted]
- Q From going to the Mine? Perhaps? A No, that you, or any of those Technical Schools, — lots of things that are cannot learn from just real experience, such as the composition of gas, and how much of it will explode, and all that.
- Q You can learn from practical experience to tell you from the signs on the safety lamp? A Yes.
- Q And you know practically as a practical man, that none the less on the floor at all you ought to be careful? A Yes.
- Q Now, had is a question entirely of experience — learning to use this cap on the safety lamp? A Yes.
- Q I mean that a new chum cannot use it at all? A Oh, a new chum can use it, but he would not know what it meant.
- Q Are you quite sure he could not use it? A He might not use it at first; but if he were given instructions where to look to find it he would find it.
- Q In it? A But that many of these deputies who are really good practical men would not be any good if it came to an examination with you and ask? A I could not tell you, then.
- Q Would you care to do an examination with you and ask? A I have had one examination; I would not object to doing another.
- Q You have found one? A Yes.
- Q What was that? A Not in a mine.
- Q What for? A, I decline to answer that question.
- Q Why? A Because it is nothing in connection with a mine.
- Q Will you tell me? A No, I will not.
- Q What was it? A It was nothing at all in connection with a mine.
- Q Then why not tell us what it was? A I will not tell you.
- Q It was nothing to be ashamed of? A No. I am my certificate. That is all.
- Q Then why not tell us what it was? A I will not tell you.
- Q You are not ashamed of anything you have done in your life? A No.
- Q Was it in connection with a Mine? A No.
- Q As a school teacher? A No.
- Q As a school school teacher? A No, I never go to school.
- Q Nothing to do with a child, I suppose? A I thought so.
- Q He is? A No. I do not need a certificate to teach him.
- Q But you want a license to look a child? A No.
- Q You do not? A No.
- Q Do you know anything about a license in this district? A I do not bother myself with a license.
- Q You said that if there had been more safety lamps there would have been more lives saved on Mount Pleasant? A I said, — In all probability.
- Q Were not men who could help themselves working out, a number of them, before the exploding parties first went in? A Yes.
- Q And those who could not walk out had to be carried out? A Yes.
- Q And the only way to carry them out was on stretchers? A Yes.
- Q Was not the whole difficulty this, that, even supposing you got in with the safety lamps, you wanted the stretchers made before you could carry them out? A No, if there had been large doors, the solid parties could have gone in and carried men out with their hands, without stretchers, and stretchers were made.
- Q You think so? A Yes, more could have been brought out that way.
- Q However, there is a fact, is it not, that as soon as they got the stretchers the men came out pretty quickly? A Yes.
- Q And there were exploring parties who had gone in with safety lamps before they got the stretchers? A Yes, as far as I know there were.

Witness—B. Smith, 27 January, 1901

Q112 Q As far as you know, those persons had to wait the evidence to see they could carry out one. A As I understood it, they needed all the men they found there and a certain distance to where the first man was up the stairs. There was unusual a distance by two men getting hold of them, until they got to the fourth man. That is what I understood was done until the staircase was got.

Q113 Q Do you not know that a number of men who were actually in the room carried out other men to the front of the door? A Yes.

Q114 Q That was done by men who were actually in the room at the time of the explosion? A Yes.

Cross examination by Mr. Bruce Smith—

Q115 Q How would you describe the condition of Mount Pleasant before the fire was put in,—was it weak or very weak? A It was very weak in a good many places.

Q116 Q You told us yesterday it was very weak with the fan? A That is in one place where I was working last quarter.

Q117 Q You said the condition was very weak somewhere in Mount Pleasant? A In the heading that I was working in.

Q118 Q That is the only one you know? A Yes.

Q119 Q As far as you know if any have been very weak in other places? A As far as I know it might have been very weak in the others.

Q120 Q Then, with regard to the place you have worked in, you have not seen any difference between the condition with the fan and without the fan? A That we would have been much worse if the fan had not been put in.

Q121 Q I am not asking you to say what it would have been. You have described the condition before the fan, and the condition now that there is a fan, in the same words, "very weak"? A It is that one particular place.

Q122 Q But that is the only place you know? A Yes.

Q123 Q But you do not know now that it is not very weak in some of the other places? A There is much more air coming to now, I think, by half.

Q124 Q But you do not know now that it is not very weak in some of the other places? A I do not know.

Q125 Mr. Bruce Smith [I do not propose to ask the witness any more questions, your Honor. Your Honor make a suggestion about cross-examining these witnesses upon their understanding of these recommendations, and about yesterday I have discussed with Mr. Atkinson the course he proposes to take in connection with these recommendations. I recognize that, to fairness, Mr. Wade ought to know what attitude Mr. Atkinson takes up in regard to these proposals, before he brings his evidence, because it may come into bringing some evidence which, after hearing Mr. Atkinson, he may not consider it necessary to bring, and it may refuse him to bring other evidence in regard to the recommendations which he may suggest to Mr. Atkinson to adopt, and which Mr. Atkinson may be disposed to adopt. And Mr. Atkinson wants to know what Mr. Wade's evidence here is in regard to the management part of this before he goes the Commission his final recommendations, and therefore he proposes to take this and it seems to me to be a very fair course, both for Mr. Lyggett and Mr. Wade in bringing his evidence. He will incidentally state how far and to what extent he was full with the suggestions concerning to himself the right to modify any of his proposals after hearing what Mr. Wade's witnesses have to say on behalf of the same witness. In that way he will have heard all that Mr. Lyggett's witnesses have to say in support of the suggestions. He will have heard all that Mr. Wade's witnesses have to say in opposition to these twenty suggestions, he will have understood between the two what his personal opinion is; and he will reserve to himself the right to modify his opinion in any way which Mr. Wade's evidence may cause him to see necessary. If at that time I do not propose to cross-examine any of these witnesses of the Boarding House any further with regard to the twenty suggestions, because I think we have fully heard from those that have already been called the greater part of all views of the reasons which they have in evidence in support of the recommendations. I think your Honor will see that that is a very fair course to take.

Q126 Mr. Lyggett [That answer does not put Mr. Wade in any different position from the position in which he stood before, except that it might suggest to him to be more exhaustive than he otherwise would be in cross-examination.]

Q127 Mr. Bruce Smith [I had proposed originally in my own mind that I should not submit any proposals to the Commission until all the evidence had been given; but it appears to me that if that were done Mr. Wade would not know, until after he had given the whole of his evidence, what mine is. Mr. Atkinson was going to take up mine in cross-examination time, and then, of course, he would get a very paley sort of way. But, if, then, proposed, Mr. Atkinson will say incidentally what position he takes up with regard to these suggestions, and, if Mr. Wade brings forward any evidence that further modifies Mr. Atkinson's view, he will have an opportunity of altering it, modifying it, before putting it permanently and finally before the Commission.]

Q128 Mr. Wade [What is the issue?]

Q129 Mr. Bruce Smith [I am doing that entirely in my friend's interest. If my friend does not like it, I will submit my original course of not making any suggestions whatever until the end of the case; and that as a whole, perhaps would lead, to Mr. Wade's having to tell a good deal of evidence which he may not require to tell, and to our not being able to leave out evidence which he may require to tell in the view of Mr. Atkinson's evidence. I only mention that because it is connected with my position as to evidence any more of these witnesses on these twenty suggestions. Their evidence is merely repetitive, and I think they have now given us all the reasons they have to advance, in their corporate capacity, as all events, in support of these propositions.]

Re-examination by Mr. Lyggett—

Q130 Q You said something about the road being worked in Mount Pleasant—the fan, I mean? A Yes.

Q131 Q Now, if the road is only worked on the fan, the fan and the other men hold a lot of fans, most they not? A Yes.

Q132 Q Then, in the event of an explosion starting at the end of one of your heading ends, there will be sufficient fans in the road and the shafts and the sides to keep it on? A Yes.

Q133 Q Therefore, so far as preventing an explosion is concerned, the watering is absolutely useless,—as far as preventing the occurrence of an explosion is concerned, watering the floor is useless? A It is particularly useless.

Witness—R. Smith, 12 January, 1902.

4125 Q Is not it necessary even in this district to have certain pillars 100 yards? A You can make 100 yards if you like, if you make pillars to every 100 ft.
 4126 Q After all it comes in the end, that if you have adequate ventilation it does not matter to you how that system of ventilation is secured? It does not matter to you by what system the mine is ventilated, if it is ventilated? A If it is ventilated thoroughly.

Now questions by Mr. Hazleby—

4127 Q Have you any fear as you are used of being cut off from the ventilation by having long stretches of roadway closed off? A Yes, sometimes both but if road fall and away the roadway down. In the Mount Pleasant Colliery they put in a from post to post, and it takes very little to pull that light back down.
 4128 Q Is that one of the reasons why you advocate cut throughs at regular distances? A That is one of the reasons—the fear of this latter being landed down.

4129 Q And cutting you off from the air? A Cutting it off from the air.
 4130 Q Have you had any cause to complain of the ventilation at Mount Pleasant Colliery prior to the accident of the boat? A Not at Mount Pleasant. I never mention complaining.

4131 Q And you have heard, in your meetings, complaints made about the ventilation? A I could not say that I have.

4132 Q You check inspectors report here all checked sufficient ventilation? A So far as I remember they and the way sufficient ventilation.

4133 Q And has the ventilation improved since the accident of the boat? A Oh, yes; considerably. I think it is very near as good that it has increased since, the fact.

4134 Have your check inspectors reports as any other reports you have had in your meetings, indicated that there is an improvement generally through the sections of the boat? A Through the section of the boat they consider there is great improvement all through the mine.

4135 Q You have heard intimation expressed with the ventilation since then? A Yes.

4136 Q Do I understand you to allude, in connection with one of your proposals there, that Managers who hold serious certificates should have those certificates cancelled unless they can pass an examination? A I think the way should be carried out. It says, "Managers with certificates of competency."

4137 Q The law does not say that of the persons here? A I understood it did.

4138 Q The law says that certain persons may hold certificates of competency. Now, do I understand from you that your proposal is that those certificates should be cancelled unless the persons are qualified by examination? A It is a very serious question, but I will answer it. If they are not competent to go through an examination they should have their time service certificates withdrawn.

4139 Q The service certificates should be cancelled unless the Managers are prepared to go through an examination? A Yes.

4140 Q Do you think there is any greater danger in a miner's reporting danger in a mine to a thoroughly competent Manager, or in his reporting to an incompetent Manager? A If he reports to an incompetent Manager, perhaps the Manager would not understand the work, whereas the competent Manager would.

4141 Q You think there would be greater risk to the mine in reporting to an incompetent Manager? A There would be.

4142 Q Do you know what system the check inspectors adopted in making these examinations? A I could not give you any definite statement what method they adopted.

4143 Q Do you know if they examined the whole workings at all? A According to their report they did. I am sure it is in their report that they examined all mine workings to the face, and all sections and sections and travelling roads.

4144 Q I think you told me that one of the check inspectors had wasted the whole of his time in Mount Pleasant? A Every nearly the whole of his time.

4145 Q That is when the whole of his experience had been gained? A Yes.

4146 Q That is Mr. Young? A Yes.

[Witness retires.]

Mr. PATRICK GLEESON was sworn, and examined, as under—

Examination in chief by Mr. Lynght—

4147 Q What is your name? A Patrick Gleeson.

4148 Q Where are you from? A A man.

4149 Q Where are you employed? A Mount Pleasant.

4150 Q How long have you been employed at Mount Pleasant? A I don't say I have been there about five or six years.

4151 Q Have you worked in any other mine? A No, not in any other mine.

4152 Q Now, have you any recollection of discovering gas at any time at Mount Pleasant? A Yes.

4153 Q Give me particular of such occasion? A The first time I found it was after being a while.

4154 Q When? A Oh, I don't say I would be there at the same time as you.

4155 Q What part of the mine? A In the place we called the Old Passage.

4156 Q What number? A The number of the place we worked in was No. 22, but this was in another place. We had moved away from this in which we were working a cut through, leaving into the heading where I was working.

4157 Q Who was your mate? A My brother, Alvin Gleeson.

4158 Q What happened? A I had a man of that day before, and of course I had to come out.

The next morning I went in, and I had another hole about a foot or a little more away, and after the shot went off there was a terrible trouble and some—well, of course I was shut out.

4159 Q How far did the shot come out? A Well, I don't say the shot through was in about 10 or 8 yards I was away up the hole.

4160 Q Where did the shot come out? A In the head where I looked away from. Of course, when I came back again to see what it was, I could see the end was, like, where I was of course, you know—the place we call when it is burnt.

Q Now, what did you do? A I was a bit of a fool of it. I did not know what to do in fact. I did not say anything about it at the time; not for a month or so after, really; not till I got up the next day.

Q Did you say anything about this to any person? A Well, of course, there were a whole lot of Jack Sells, and Billy Pierce, and my wife, and me.

Q Do you know whether Sells and your brother saw this? A Oh, yes. We all saw it. No, I do not think Pierce was at work that day.

Q And Sells and your brother saw it? A Yes.

Q When was this next morning? A The next morning I was working in the building.

Q What number? A No. 25. I had finished the catch-down. It was just about dinner time, and just as we were going to our dinner, I had the shot.

Q How long ago? A I don't say it would be just before the new year. My name had gone to be changed some distance, about 40 or 50 yards away, and Sells and Pierce were in at their work in at the door. Of course I went to see what the shot had done, about four or five minutes afterwards, and I went in with my light, looking the same as usual, and it all seemed all right. It gave me a green start, and I was almost thinking about running to leave the place at once.

Q Where did it start to turn from? A Over my head.

Q The roof? A Yes, all round.

Q At the time all in it had been seen from the floor of the first? A From 2 and 3, I don't say.

Q What did you do? A I got my hat, that was the only thing I had. I thought the best thing I could do was to try and knock it out. I took off my hat, and I suppose I was some minute or two knocking it out.

Q Knocking what out? A The flame, the light. I succeeded in getting it out, and I went out. I thought the others might not believe me, and I said then it was, and, when I went in to show them where it hit, it went off again, and it burned gradually and then with a blue light.

Q How long did it keep alight the second time? A I suppose three or four seconds.

Q How long was it alight the first time before you got it knocked out with your hat? A I don't say it would be a minute or less.

Q What did you do after that? A The whole place in at the meantime, and of course I wanted to report it, and I saw John out on the flat, and he went home and I reported it.

Q What did you say to John? A I told him there was a gas fire. McDonald was there too.

Q What is McDonald? A Alfred McDonald, the cleanup.

Q And what is John? A He is a sort of head deputy or under manager, or something like that.

Q What did you say to them, or to him of them? A I told them there was gas there. Of course they remained with their lights. I do not understand the light.

Q What? A Well, I don't do just now. The whole place? A Yes. I have only been used to the whole thing. John suggested it, and I had another shot made in fact, and he asked me would I be going before I heard the hole. I said, "No, I'm here now." I thought he was going to say that I fired the shot. He wanted and I fired the hole, and he got his lamp in the hole, and then he said it was not worth speaking of.

Q Now, I don't say it was not worth speaking of? A Yes.

Q Did McDonald say anything? A Well, of course, John came around it. He said it was smoke from the door, but there was no smoke there. The smoke had gone when it hit.

Q When John told you it was a smoke from the door, you knew there was no smoke there when it hit? A Oh, I was certain.

Q Was anything else said by John? A No. He told me to go on working just the same as usual.

Q Was there anything said by McDonald? A No, only that it was just like the smoke, he said it was not gas at all. He said first gas the smoke makes for the gas, but I have worked in smoke with the same light, I could not see my hand in front of my face.

Q Was that all that happened on that occasion? A Yes.

Q Was there any other occasion? A My wife came out another time and told me that eight days later I was not there then.

Q Yes, did not she? A No.

Q Do you know whether either John or McDonald reported in a book what you had reported? A I could not say.

Q You were speaking about smoke? A Yes.

Q What was it you wanted to say? A On eight days I have fired a shot, and the smoke has never left there for the whole night, but it never lit.

Q Where was that? A In a place called No. 4.

Q In No. 4? A Yes.

Q How long ago? A About twelve months ago or a little more.

Q That was the second day after the first? A No, there was not the best of air. Of course there was not, but there was, so the smoke would not have remained there.

Q I understand there was not enough air to keep the smoke away all night? A No.

Q Has that been a frequent experience with you—the smoke accumulating? A Yes. I have worked in places often when the smoke was in, or deep, as long as it before it would go away.

Q Has that been recent? A Yes. We have had large meals with our shirts and we were on.

Q That is what you mean. How often have you had to do this sort of thing? A It is pretty often, when you are in these shooting places when the smoke accumulates.

Q And in this recent case? A Even up to last afternoon we were in a place where all the smoke from all the other men used to come in when we were, or we had to be there all day too.

Q Just tell us where that was? A In the Old Straight.

Q What number? A No. 25.

Q Then did I understand that all your working day you were working in smoke that had come to you from other men's places? And it was never more? A Oh yes.

Q That is what I said? A Yes.

Q And, again, from this smoke, what was the kind of shot? A I don't think the voice as it were spoken, as they did not say it as well with us. I was not able to see any smoke from the smoke.

Q The effect of the smoke on you was that you could not see your marks? A No.

Q Yes.

- 6579 Q Did it make you cough, or anything like that? A No; I have never coughed; but I used to have to leave sometimes and go out to get into where the air was fresh.
- 6580 Q Did you ever complain of that to the physician? A Yes; we have spoken of it many a time, and at various times would say it was the other men's smoke.
- 6581 Q Was would say that it was the other men's smoke? A The physician.
- 6582 Q Watch me? A Allick McDonald. He said we should have to stop showing if the doctor sustained that way, and of course we told him then that it was from the other men. You cannot, perhaps, we would not have tried a shot at all. Of course we would have to put up with this smoke that came from the other men.
- 6583 Q And, in addition to the smoke, what was the air like? A It was very hot. You would almost choke if you were lay at all down.
- 6584 Q How long would you have to remain away from your work to get some fresh air? A Just a few minutes.
- 6585 Q And how far would you travel to get the fresh air? A. You might have to go 20 or 30 yards. The air would not be so hot then.
- 6586 Q Was the breeze kept right up to the face in that place? A Not until I left the gas. After it had in the gas and exposed of they made a hole more ventilation.
- 6587 Q How? A By putting up more brattice.
- 6588 Q But at the time the smoke used to come from the other men and remain with you, how far was the breeze from the face? A I don't say it would be 5 or 6 yards.
- 6589 Q Do you know whether the Mine-men know of that condition on the state? A Yes, the Mine-men know of it. When he came in he would be going along and show us; you would not see with the light.
- 6590 Q Was it that? A He does.
- 6591 Q Mr. J. C. James? A. He would say we would have to stop the showing altogether if there was so much smoke.
- 6592 Q How often has he had that trapping operation? A He generally used to come round about once a fortnight.
- 6593 Q What would he trap for? A They are not very level roads in there; and if the smoke is that thick you cannot see where you are going properly.
- 6594 Q But not to let you work in there? A Yes.
- 6595 Q Are you working in the same place now? A No; I am working a long way off. I am working near Daylight, they call it. It is good air where I am now.
- 6596 Q It is near the tunnel? A It is within a few minutes' walk of it and out.
- 6597 Q You said something about not understanding a safety lamp; did you start use a safety lamp? A No.
- 6598 Q Do you know how to examine the gas? A No.
- 6599 Q What you may risk how to examine for gas with the safety lamp? A They have often said there would be a little more there on the top.
- 6600 Q But could you examine? A No, I do not know anything at all about it.
- 6601 Q Do you think you are competent to fire a shot? A Yes.
- 6602 Q You think you are? A I have had a lot of experience in it, anywhere.
- 6603 Q How do you light your shot? A With the naked light.
- 6604 Q And when you are firing the shot does your eye ever get anything at all wrong? That is, has the shot moved has frequently with you? A No, I don't say I have had about there in all my experience.
- 6605 Q Is there any danger in that, where you fire the shot? A Yes, there is plenty of dust.
- 6606 Q What happens when you fire a shot? A We are not near the shot at the time, you see we have to get a good bit away.
- 6607 Q But you see the result of what the shot does. In addition to blowing out the coal does it do anything to the dust? A It makes a great dust cloud.
- 6608 Q How long does it take this great dust to settle? A That always depends on the air.
- 6609 Q On an average, what is your experience? A It might be five or six minutes before the dust would settle.
- 6610 Q Have never taken much particular notice.
- 6611 Q Where is that dust settled found? A I don't say, mostly, from the shot, because where I was working last time, where this gas is, the coal was in a sort of deep mine.
- 6612 Q The coal was deep? I am keeping in the places where you say it was deep. Where, in addition to the coal, that the dust comes from?
- 6613 A [Pause] The dust not say there was dust in addition to that from the coal.
- 6614 A. [Pause] Q Was there any place other than the coal where the dust came from? A Along the road.
- 6615 Q What do you mean by along the road? A Where the horse travels—all round the roads.
- 6616 Q And the other? A Yes.
- 6617 Q And what about the roof? A I could not say. I do not know whether any comes from the roof.
- 6618 Q Is there any dust on the roof? A A small quantity.
- 6619 Q And what is about the thickness of the dust in the dustiest place where you fired the shot, on the face? Where has much is there on the ground? A In some parts of the mine there's a little bit perhaps 2 or 3 inches.
- 6620 Q Do you know that there was any danger in firing a shot in a dusty place? A No, none.
- 6621 Q Do you know it now? A Yes; I have been afraid since I let the gas.
- 6622 Q With the exception of the light you get through lighting the gas, do you know that there is any danger in firing dust again? A No, only what I hear from talking of; that they reckon the dust is explosive.
- 6623 Q Is that since Knapdale? A That is all.
- 6624 Q Is any water put on those places where you let off these shots? A No, not where I have fired.
- 6625 Q Have you ever seen any water up there? A No.
- 6626 Q But since since the disaster? A I have never seen water, unless it has been put there in the night, when I was out there.
- 6627 Q You could tell that, surely. A Yes, I do not think they have.

6417. Q. Do you know whether there were the roads? A. I have seen the water lying on the roads when I have been travelling to and fro. They have a water bed there now.

6418. Q. You have never seen water in those places where you find the shots? A. No.

6419. Q. How long do you think it would take the shot to settle, when it is aimed? A. About five or six minutes.

6420. Q. Is your engine road the travelling road at Krim? A. No, not just at present. Of course, it has been the travelling road.

6421. Q. Do you know the size of the machines there? A. I never took much notice. They might be 8 or 10 feet, by about 2 or 4 feet wide.

6422. Q. Do you know of any accident having occurred there through the machines being too small? A. No; I have never known of any such.

6423. Q. As your opinion, are those machines big enough in case of any accident, or should they be bigger? A. They would be big enough for one man, or two or three or four men. If there were a lot of men going along in a row they would not be big enough.

6424. Q. If there were more than four men, would they be big enough? A. Oh yes, they could "squeeze" into them.

6425. Q. About how many men could "squeeze" into them? A. I have never taken much notice. You might pack six or seven.

6426. Q. Do you know the various roads out of Kono (Recommendation No. 18)? A. I know them pretty well. I have travelled pretty well all the roads there.

6427. Q. How many are there? A. There are the main lateral and two other travelling roads.

6428. Q. Would you be able to find your way out by any of those roads there? A. Yes, I can get my way out on any of them.

6429. Q. Has any person ever showed you these roads out? A. No.

6430. Q. Did you discover them by walking in places immediately adjoining them? A. In different parts of the mine. When men were coming out I would go with them.

Continuation by Mr. Wade —

6431. Q. Just let me understand more clearly where it is that you had this trouble with the water. What do you call that? A. No. I —

6432. Q. No. I don't? A. Yes.

6433. Q. What were you working in? A. A level on right side.

6434. Q. What particular work were you doing? A. Drilling rock.

6435. Q. How far is it would that be from the tunnel mouth? A. I suppose it would be 25 miles.

6436. Q. What shot was this place in, where you say the shot fired up? A. In the Old straight.

6437. Q. Whereabouts is that, compared with No. 11? A. It is working, No. towards this No. a distance in feet they had bored into this No. 1, but not, of course, where I was working, but I believe they are now bringing the road out from No. 1 by the Old straight.

6438. Q. How far is it from that? A. I suppose it would be 3 miles.

6439. Q. You are working in a cut through of a level? A. Yes.

6440. Q. You say you had put a shot in before that which fired up? A. Yes, I had a mind that the day before.

6441. Q. You mean to say that the shot the day before did not go off? A. It never went off.

6442. Q. What did you do with the hole? A. I had to go home that day, and had to report it.

6443. Q. Was that shot down as left? A. It was left.

6444. Q. How close to that shot did you put the second one in? A. From 1 foot to 15 inches.

6445. Q. Did the shot, that went off, as far as you know, light the second shot too? A. Yes.

6446. Q. You had a double explosion? A. Yes.

6447. Q. Did you notice the colour of the flame that looked out as fired up? Was it reddish? A. No; it was a blue light.

6448. Q. Did not you see any red flame at all? A. No.

6449. Q. Not when the shot went off? A. No; I never noticed any red flame.

6450. Q. Not at all? A. No. Of course I was some distance away from it. It just faded out of the head round the lantern, and I saw it fade out and heard the whistle and bang.

6451. Q. What because of the flame. Let me understand? Was it a long tongue of flame? A. It must have been a good deal, I am not about 5 or 7 yards.

6452. Q. Did it stay like that? A. It stayed like that for some seconds or so.

6453. Q. What happened then? A. I was half dead to go back in the mine.

6454. Q. What happened to the flame? A. Then it went out.

6455. Q. It was only a question of seconds then? A. Yes; something like that.

6456. Q. Then you went up with your light, I understand, to the fire? A. Yes.

6457. Q. Whereabouts did it light then? A. It was not at that position that it lit with my light at all. It was in the heading but it lit with my light.

6458. Q. That is the whole of the flame you saw at that time? A. That is the whole of the flame that I saw at that time.

6459. Q. When was it you first spoke to Sells about it? A. Sells saw that himself.

6460. Q. That is all what I asked you. When was it you first spoke to Sells about it? A. I spoke to him then. I said — "That was gas right enough." We went in there afterwards and saw where the coal had been lowered like where, the same as if it had been exposed.

6461. Q. Nothing else then when you were with Sells? A. No.

6462. Q. Where was the next accident? Is the same particular place? A. Within about 7 or 8 yards. We were in the heading, driving the opposite way.

6463. Q. This cut through was between two headings, the cut through where you had the flame? A. We were driving the cut through in to where we were working, to fetch better air.

6464. Q. And after you had driven the cut through? A. We were there driving the heading.

6465. Q. After you had driven the cut through you went back to the heading? A. Yes.

6466. Q. And you saw that light again in the heading? A. In the heading.

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Witness—F. Glenn, 22 January, 1965.

- 4617 Q Who was working in the building? You and your brother? A Yes, only me and my mate.
- 4618 Q Where was Bill? A He was working in his own shed, going the same way as the building; but came more about 16 yards between the two.
- 4619 Q Was the coal between you and him? A Yes.
- 4620 Q A shot was fired that time, and I understood you to say that there was no flare-up when the shot went off? A Yes, no flare.
- 4621 Q Whereabouts did it light afterwards? What particular part? A I went in afterwards to see what the shot had done, just below 2 in down to my dinner.
- 4622 Q Where did it light? A It lit all over my head, and went down all over the coal that the shot had knocked down.
- 4623 Q How far off was the flame? A I suppose it was 6 or 7 feet high.
- 4624 Q The flame was on the roof where your head was and it came down to the coal that had fallen? A Yes.
- 4625 Q How far did it come from the roof? A Down to the coal, I suppose 8 feet.
- 4626 Q There were 6 feet in height of flame? A Yes.
- 4627 Q And how long over your head? A It was up to the roof.
- 4628 Q And along the roof? A In run, I suppose, down 2 to 3 yards back from where the flame was.
- 4629 Q You said it was round you? A Yes.
- 4630 Q Was it on your sides too? A I stopped back out of the way when it lit.
- 4631 Q When it lit it came down about 6 feet, almost to the floor, and it was over your head as last time? A Yes.
- 4632 Q Was it on your sides at that time? A Yes, it was all round me.
- 4633 Q You were a lucky man, were you not then? A No, I got back too quickly out of the way.
- 4634 Q You lost it the first? A Yes, of course, I stopped back at it when I was up to the roof.
- 4635 Q Did it run back when it lit? And it ran back from the face? A Yes, where the coal was, it ran back from the coal.
- 4636 Q Was there any report, any noise, when this lit? A It gave me such a start I did not take much notice of anything else.
- 4637 Q Where was your light when this was first lit? A I had it in my hand, looking at the shot to see what was on the floor; to see what the shot had done.
- 4638 Q How much coal was there on the floor? There or four tons? A Yes, about four.
- 4639 Q When you standing to examine the coal on the floor that had fallen? A Yes.
- 4640 Q Were you standing over the coal? A Just standing like this to see what the shot had done and away it went.
- 4641 Q What did you do then? A I took off my hat. Of course it was gradually getting smaller, and I looked it out with my hat.
- 4642 Q How far back did you stop before you began to get it out with your hat? A About two yards.
- 4643 Q And it never reached you? A No, the flame never hurt me.
- 4644 Q How long was the flame playing 6 feet in height? A Some five seconds.
- 4645 Q Until you put it out? A Yes.
- 4646 Q You came back, and you say it lit again? A Yes; I thought they would not believe me that there was gas there.
- 4647 Q Never mind about that. You went away, and when you came back it lit again? A Yes, I went to show them where it lit.
- 4648 Q What part did it light this time? A In the face, and all over the coal, in the cracks.
- 4649 Q Was that like a gasp here again? A Yes, could see a little blue light run along the coal, that was—(coughing). It burnt very nice and (coughed).
- 4650 Q Did you tell of these details to John or McInnes about this big flame? A Yes.
- 4651 Q Exactly as you have told me? A Yes, in fact, I told them it was just the same as if you had up a bag saturated with kerosene.
- 4652 Q Now, let me understand also these places where there was so much smoke, were there many people firing shots at that night? A Yes, they fired shots in almost every place there.
- 4653 Q Did they fire many during the course of the day? A Yes, in that shot in the day sometimes; sometimes one.
- 4654 Q How many places were firing shots at that time? A Sixteen or seventeen places.
- 4655 Q And they ought to be two or three shots in their shift? A Yes.
- 4656 Q Is that an unusual amount of firing, as far as you know, in Kield? A No.
- 4657 Q It is a common thing to have? A It is a common thing to have three fired in that way.
- 4658 Q To have so many as forty or fifty shots fired in the one shift? A Yes, in fact, you would hear them all day long.
- 4659 Q How long did it stay like this, in this smoky condition? A It was not so bad after I had lit the gas. They got up more smoke, and that used to take it away a little quicker.
- 4660 Q But I understood there is no gas in this No. 6 District? A I never saw any gas there.
- 4661 Q You saw where the smoke was in fact, you say? A The smoke was there every night, if we fired the shot; but we used to try and avoid firing the shot in the shaft; we prepared it the night before, if we could.
- 4662 Q How many days did the smoke in this way? A All the time we were there.
- 4663 Q How long was that? A Three months.
- 4664 Q It never improved? A No, it was just the same where we left it when we started.
- 4665 Q Did you say any of the Government Inspectors or the District Inspector? A We worked there in the night shift, and at times they did not come round in the night.
- 4666 Q There were no Government Inspectors in that place during the night? A No.
- 4667 Q What month was that? Just before Christmas? A That was over twelve months ago.
- 4668 Q With regard to the first gas and one of the places was damp where you were firing shots? A The coal was not damp; had a sort of damp nature.
- 4669 Q It must have been a lot damp there? A It was not damp, and it was not dry, exactly. You could raise the dust there. You could go along and kick the dust up with your feet.
- 4670 Q The coal is too far I am talking about. That was damp? A No, it was not damp. It was of a sort of damp nature.

6134. Q That will do me if you cannot get any sadder than that. Was it deeper than usual? A No; it is always the same. Well, of course, I could not explain. If you were there I could show you the difference between the dampen and the very dry coal. It is a very dusty and altogether. Some parts of the mine you are very dusty, in fact, when you go onto it the dust would almost choke you. This place was not as bad as that.

6135. Q What is the nature of the coal there? Is it hard? A Yes, it is a hard coal.

6136. Q Is that more dusty than the soft coal, or how dirty? A The soft coal, I believe, is the dirtiest of the lot.

6137. Q And this is about the hardest and in the mine in the Old Straight? A Yes, pretty well. Mostly all were dumping there.

6138. Now, the dust in the working place is very different from the dust in a bridge road—is it not? A No, it is a regular fine dust.

6139. Q Is it much coarser, taking it as a whole? A Oh, no, something about the same.

6140. Q You mean to say the dust in the working place is the same as in the bridge road? A Yes.

6141. Q Just the same? A Yes.

6142. Q No difference? A No. The horse stir it up as he goes along the same travelling road.

6143. Q And the horse is usually between the rails? A Yes.

6144. Q The only trouble for men who are working in there, and the difficulty when they come out? A Yes.

6145. Q You have made a statement that it is dangerous to take a dust in a hole? Do you know anything about coal dust, and what kind of dust is dangerous? A No, I know nothing at all about it.

6146. Q So you are going on what you have been told? A Only what I have heard about the dust coming in a mine.

6147. Q With regard to the smoke, let me ask you one more which it was like. Do you say it was so thick that you could not see? No, I think that a man would usually trip up. A Yes, it is an such great volume of smoke all along the road—in fact, the wheeler was always completing.

6148. Q I do not want to know about the wheeler. I want to know about your place. Do you mean to say it was so thick that you could not see when you were stopping? A Yes.

6149. Q Knew with the naked light? A Yes.

Cross-examination by Mr. Bruce Smith.—

6150. Q What is the name of that wheeler? A I think his name was Duden.

6151. Mr. Smith? Q Did you say the smoke was always coming in? A Yes, every day.

6152. Q That whilst you were working did you say the smoke kept coming into your working place? A Yes, it had to come right round our fire to carry it away.

6153. Q Therefore evidently there was a current of air? A Yes, or it would never get there at all.

6154. Mr. Bruce Smith? Q I understood the air was going directly towards your working place from a number of other working places down below,—and the smoke from there also had to come past you before it got out? A Yes.

6155. Q And it was about your place? A Scopped about for hours, in fact, the whole week at times.

6156. Q And you say this wheeler was constantly completing of this mine—Duden? A Yes.

6157. Q Is he there now? A Yes, he is there at the present time.

6158. Q Do I understand you have never had any experience except in the Mount Kora Mine? A That is all.

6159. Q And only five or six years? A Yes.

6160. Q What other occupations have you followed? A I have been working in the town here, at the gunners.

6161. Q Other work, not mining? A Yes.

6162. Q When did you first know that you were coming here as a witness? A When this gentleman came to me and gave me a ——— [interviewed].

6163. Q When the constable came to you and gave you a witness? A Yes.

6164. Q That is yesterday afternoon? A Yes.

6165. Q When did you inform in the mine that you were mining? A I was home from work.

6166. Q And you have not been back to the mine since? A No.

6167. Q And you have had no conversation with anybody in connection with the mine? A No; I have had no conversation with anyone.

6168. Q You say that when you went back after being the shot you heard of the smoke hanging about. How long was that after the shot, had you heard? A On each occasion.

6169. Q When you [named] McDonald and Jubb? A There was no smoke hanging about then at all.

6170. Q No smoke? A No.

6171. Q How long was it after you had fired the shot before you went back, when this explosion of gas took place? A About four or five minutes.

6172. Q And that is about the usual time you remain away, is it not? A Yes.

6173. Q Do I understand you to say you had McDonald immediately? A Yes.

6174. Q And you told Jubb? A Yes, I explained it to both of them.

6175. Q And you have told me that Jubb said that it was only smoke? A Yes; he said the smoke makes you feel worse than the shot. He said there is a certain quantity of gas in it.

6176. Q He did not even believe your statement about gas? A No, he did not.

6177. Q I understood you told Jubb and McDonald distinctly about it, and described to them what occurred? A Yes.

6178. Q Were you in the Mount Kora Mine before the fire was put in? A There is no fire in Mount Kora Mine.

6179. Q Yes, my. I have often complained to the degree of this smoke coming out from other men? Are there any other degrees than the three of Jubb and McDonald to whom you complained? A No.

6180. Q Are there any other degrees than the three of Jubb and McDonald to whom you complained? A No, there are only two degrees there.

6181. Q Jubb is an assistant in the manager, I understand? A Something in that sort. I cannot tell you what he is.

6182. Q You cannot tell me the names of any others to whom you complained? A No.

- 8750 Q Did you complain to the Manager, Mr. Jones, when he came round on that occasion and tripped on the floor? A No, he came round and said we would not have to fix as much. It was his own complaint.
- 8751 Q He complained of the smoke? A Yes, and said he would have to stop in much shooting.
- 8752 Q Did you ever tell him, on that occasion or any other, about the gas you had found there? A No.
- 8753 Q Did he speak of it to you? A No.
- 8754 Q About the firing, is the same account of firing going on in all parts of this mine, or more in this part? A That was the main part of the mine where this thing was mostly done.
- 8755 Q You are firing there every time there? A Yes; we could not get the coal without shooting.
- 8756 Q Is the other portions of the mine, what proportion of time did you have to fire? A I am sometimes now in a portion where we have not got to fire at all.
- 8757 Q But in that one you had to fire every time? A Yes.
- 8758 Q And the others had to fire every time? A Yes.
- 8759 Q How many times did you fire in the day? A I could fire as much as three shots in the day.
- 8760 Q And how many places were there down below you, where smoke was coming up to you? A About sixteen or seventeen. Of course, I do not know exactly.
- 8761 Q Rightly? A Yes, I should say there were that many.
- 8762 Q Will you tell me what watering is done in that mine? A There are pipes laid in; but I have never seen it worked. I think as I have been traveling through I have seen the rocks wet.
- 8763 Q The road that is in the floor? A Yes, the bottom road.
- 8764 Q Have you ever seen the mine wetted by water? A I never took any notice.
- 8765 Q Have you never seen any apparatus for watering, spraying, or anything of the kind? A No.
- 8766 Q Is the whole of your fire part? A Yes.
- 8767 Q When the smoke came up to you from the other places, did any dust come up? A No; I never took any notice of the dust, mostly the smoke.
- 8768 Q You were asked by Mr. Wade whether you did not see a red flame when the shot was fired. Would you be in a position to see the flame of the shot when it goes off? A No; not in the shot.
- 8769 Q You would be some distance down, and round a corner? A Yes.
- 8770 Q You would not expect yourself to be able to see the explosion? A No.
- 8771 Q So that even if there were a red flame from the actual shot you would not see it? A No; I could not see any red flame.
- 8772 Q But what you saw——? A Was blue.
- 8773 Q What you saw was what was exposed when you had gone up to see the face after the shot? A, Which?
- 8774 Q The face? A Oh, no; while I was up after the shot was fired.
- 8775 Q Then you looked round the corner? A No; I was standing in the road waiting for the shot to go off.
- 8776 Q Supposing the face is where you are, and you come back as far as to me; you would not stand here and look at it? A No, I would come back to where you are, and then go up this way.
- 8777 Q Where you were you could not see the face of the place where the shot was? A Yes.
- 8778 Q How long would you remain away? A I would remain away that time, getting on pretty well on my own.
- 8779 Q It was, then, after that ten minutes that you came up and this explosion of gas took place? A No.
- 8780 Q When? A I do not know which time you are talking of.
- 8781 Q Did you see the flame come round the corner then? A Yes.
- 8782 Q How far down had it to come to come round the corner? A It had to come 6 or 7 yards; I could see the flash, the blue.
- 8783 Q Then you saw it clearly as it came round the corner? A Yes.
- 8784 Q Is that down in the mine now? A Yes.
- 8785 Q And a whistler? A Still whistler.
- 8786 Q Do I understand that some since this explosion, as you call it, you have still used lights and that you still fire your shots with the naked lights? A Yes.
- 8787 Q Has the breathing has been improved? A The breathing has been improved, yes.
- 8788 Q Which was the position of that shot in the face of the coal—down below, or the middle, or high? A Where I heard the hole?
- 8789 Q The second hole? A The second hole?
- 8790 Q When the first did not go off? A I suppose it would be about 2 feet from the roof.
- 8791 Q About half way up? A Yes, the second shot. The first was between 2 and 3 feet.
- 8792 Q It is about 4 feet from rear end to the floor? A About?
- 8793 Q And your shot was put where? A About 1 foot 2 inches from the roof.
- 8794 Q And your second shot was put in about——? A About 2 feet down.

Examination by Mr. Robertson—

- 8801 Q When you reported the firing of the gas to the officials have any of them shown any feelings towards you? A No, there has been no ill-finding shown towards me.
- 8802 Q Then you had no hesitation in making a report? A Not a bit.
- 8803 Q You had no fear of being dismissed or suffering in any way? A No fear at all. I would not be frightened if they put me off to prison.
- 8804 Q And you would not hesitate to report to someone? A No. I think there are just as good fish in the sea as ever were caught. If I do not get work there, I can move where else.
- 8805 Q I think you said that the six from sixteen or twenty places had to pass over your place? A Yes.
- 8806 Q Therefore, if that firing is carried on in every one of those sixteen or twenty places, you would have to endure sixteen or twenty times more smoke than the best man would experience? A Yes.
- 8807 Q And, with the very best facilities, you must have fifteen times more all the other places? A Yes; I used to get the smoke.
- 8808 Q You could not stand it? A It had to come that way.

- Q237 Q If Gary were a barrister of our that way it is still possible that you must have the full benefit of all the smoke produced by the fire in that district? A Yes.
 Q238 Q What happens in case of firing shots? A Powder. I always use blasting powder.
 Q239 Q What happens? A Clay, since the explosion.
 Q240 Q Where when explosion? A Mount Kneble.
 Q241 Q What before that? A Anything we could get hold of—the dust off the road, damped.

Examination by Mr. Nathan —

- Q242 Q Is that glass in No. 4 where you complained of smoke, how far was the last cut-through from the place where you were working? A It was a 1 yard heading and I drove the place down into certain quarters, and then I had to come round and put a cut-through in.
 Q243 Q You drove the heading a certain distance, and then came round to put in a cut-through? A Yes.
 Q244 Q How far was that from the face of the heading? A I suppose about 42 yards.
 Q245 Q And how far was the last cut carried up from the cut-through towards the face of the heading? A From the cut-through.
 Q246 Q Yes, towards the face of the heading? A I do not understand exactly what you mean.
 Q247 Q You say now the cut through would be about 40 yards from the face of the heading which you drove up a certain distance after cutting? A Yes.
 Q248 Q You worked a 1 yard heading? A Yes.
 Q249 Q You drove it up a certain distance, and then you came back into the cut through? A Into a head so drive a cut through into the heading.
 Q250 Q How far was the cut through which gave you your ventilation from the face of the working of the heading? A The heading was not quite down to where we drove the cut-through. We had to drive back over to meet it.
 Q251 Q How far was the other one that was driven previously? A About 40 yards.
 Q252 Q That was the nearest opening to the face of your heading? A Yes.
 Q253 Q How far was the last one? A The last one was down to the head. It was down the 60 yards where we broke away from.
 Q254 Q Your ventilation would require to come through this cut-through in order to go up the heading or head? A Yes, after we had finished the cut-through.
 Q255 Q Can you make a sketch of it? I cannot get the meaning of that. A [Draws down a sketch and explained it.] There was a person head down the way, and there was a cut-through some here [at right angles to person head] and our heading went down there [beginning at end of, and at right angles to the cut-through head mentioned, and parallel to the person head]. We went down that way about 30 yards [meaning the heading was continued 25 yards from the end of the cut through]. Then, of course, the head [the person head] continued straight on.
 Q256 Q The person head? A Yes. The person head continued straight on, and we came into the person head here [indicating a point in person head about 40 yards from opening of cut-through first mentioned] to hole over into their heading.
 Q257 Q What I want to know is what the distance was from that cut-through in the heading to the face of the heading? A The last one was kept up fairly close to the heading.
 Q258 Q The distance would be between 30 and 60 yards? A Yes.
 Q259 Q Your ventilation, of course, went through that cut-through? A When we worked in the heading the ventilation had to come up this [person] head, and then come down [the cut-through] behind the last one into our heading.
 Q260 Q The current would not go through the second cut-through until after you laid it? A No. The request of us that was travelling had to go down the person head first [to the end], and then come back behind the last one, and down into our place [through the first mentioned cut-through into the heading]; and then it went round the last one and down to the other one.
 Q261 Q The ventilation, of course, came up the person head, up to the face of the person head, and down the side of the person, through this cut-through, and up this side into your heading? A To the face of our heading.
 Q262 Q I take it you drove to the point where you thought you would hole, before you stopped? A No; we did not. We worked on off two men. We did not start the heading when we drove the second cut-through there.
 Q263 Q They stopped the heading really before you were up to the distance for the cut-through? A Yes.
 Q264 Q How far was the last one carried down the end of the cut-through to your heading towards the face? A It used to be kept up fairly. Of course, at one time the Inspector came in when we were in this heading, and he said it would be as well to put over a cut-through.
 Q265 Q What would be the distance then? How far would the last one be from the face of your heading when you were complaining about the smoky conditions? A I suppose it would be about 3 or 4 yards.
 Q266 Q And was the smoke thicker in the face than on the outside of the current? [Witness did not answer.]
 Q267 Q You see not have 3 or 4 yards where you have a current? A Yes.
 Q268 Q Was the volume of smoke thicker there? A Oh, yes. Sometimes we would go in to fill the ship, and we would be to go up to bed where the coal was.
 Q269 Q That was at the face of the machine? A Yes.
 Q270 Q Was it always about way back? A Some distance back, a long way back.
 Q271 Q When you complained of that smoke, did they make any attempt to increase the ventilation? A Yes; put the last one up.
 Q272 Q If that made any difference? A It did not make a great deal of difference, but, once the Inspector came round, they turned us out and told us to put in this cut-through.
 Q273 Q Could you feel the current? A No.
 Q274 Q Did it cause any difference of seen light at all? A Of course, your light would be still; but if you put it at the last one you might see a better light in.
 Q275 Q Behind the last one? A Yes.
 Q276 Q What would be the distance between the last one and the side of the heading—about 15 yards? A Yes, about that.
 Q277 Q And you could just see a little better than? A Yes.

Witness—F. Glavin, 22 January, 1933

- 6874 Q If you put a light behind the location, the distance between the location and the sidewalk being about 12 inches, you would get a slight deflection of your light, is that right? A Yes.
- 6875 Q This continued during the whole evening of the quarter—the smoky condition of the place?
- 6876 A When we drove the usual cut-through, of course, they ventilated it after we had the explosion, and took the smoke away much quicker.
- 6877 Q For you did make an explosion in this place? A No. The smoke was there all the time.
- 6878 Q Did you ever complain to Mr. Jones himself when he came on about the ventilation? A No, I never spoke to Mr. Jones about it. I thought it was quite sufficient to speak to the deputy.
- 6879 Q Did you regard the ventilation there as deficient? A Not enough air.
- 6880 Q Yes? A I know there was not enough air there.
- 6881 Q And I think you told me you complained to the deputy—you were working in this place at night? A No, it was No. 4. This is in the Old Straight; you are talking about now, is it not?
- 6882 Q You have told us here that the smoky conditions were in No. 4? A Yes, are you talking of No. 4 now?
- 6883 Q Yes. No. 4 is where you had the smoky conditions? A I had it in both places.
- 6884 Q Now, we will take you to the place where you were working at night? A That is over twelve months ago.
- 6885 Q That was in the Old Straight? A No; No. 4.
- 6886 Q Very well, No. 4. Did you have smoke to complaint of there also? A Well, of course, I never saw anybody there very much, only the night deputy.
- 6887 Q Where the conditions smoky there at night? A Oh, yes; the day shift men were complaining terribly about it.
- 6888 Q And did you have those smoky conditions at night? A Oh, yes; there were only one or two men were working there at night, and the best.
- 6889 Q And after firing a shot, did you have the smoke with you all night? A Yes.
- 6890 Q Did you complain of that also? A No, I never complained of it there.
- 6891 Q You are talking of the No. 4 now? A Yes.
- 6892 Q Where you were working at night? A Yes.
- 6893 Q Did you complain about that too—about the smoky conditions there at night? A No; I never complained of it there.
- 6894 Q How far was the location of the fact in that place? A Sometimes it would be 6 or 7 yards.
- 6895 Q Did not you complain to the night deputy? A No. I thought there was enough complaint about it in the day. If they could not improve it for the men in the day, I thought it was as bad as my complaining, and they could not improve it for me at night.
- 6896 Q There were two men working at night, and you thought it would be clearer at night? A Yes.
- 6897 Q Who was the deputy on that occasion? A Richardson.
- 6898 Q Did he see those smoky conditions? A Yes.
- 6899 Q Did he ever pass any remark about it at all? A Not that I remember.
- 6900 Q Did he on any occasion put any location on it? A Yes, he used to put up the location.
- 6901 Q That was part of his work, I suppose? A Yes.
- 6902 Q Was he the remaining deputy for the place for the day shift men? A No, he was the night deputy.
- 6903 Q And who made the examination of the place for the day shift men? A Jack. He was a deputy at that time.
- 6904 Q Did he come in during the time you were working your shift? A No; I never saw him at all for the three months. Of course, I was in the night, and he was on in the day.
- 6905 Q Now, going to the place where you had this firing of gas, did the deputies visit the place there every day? A Yes, Deputy McDonald was there every day.
- 6906 Q Did he carry a safety lamp or a fire lamp in the daytime? A Sometimes the safety, and sometimes the fire lamp.
- 6907 Q After having reported this gas, did he generally make an examination when he called in every day? A Yes, he generally made an examination.
- 6908 Q What did he do? A Put the lamp up in the roof.
- 6909 Q The fire lamp? A No, the safety lamp.
- 6910 Q Did he fire the cut—did you do any cutting there? A No.
- 6911 Q He lifted his lamp to the roof and looked for the gas? A Yes.
- 6912 Q Did he do that in every case? A I think so.
- 6913 Q And he came in regularly every day? A Yes.
- 6914 Q How far was the location of the working fire in the place where you had this gas? A I don't say it would be 1 or 2 yards—something like that.
- 6915 Q After having by and by noticed that gas, was the location moved in closer? A Yes; it was drawn up within about 6 or 7 feet then.
- 6916 Q Was it moved up any distance afterwards? A No. Of course, I did not work in it a long time afterwards. After that there was a little open location, and I would talk it up myself—like we talk it in close to the floor.
- 6917 Q What part of the mine are you working in now? A Daylight.
- 6918 Q What is the state of conditions there at the present time? A There is good ventilation there.
- 6919 Q And all your complaints appear to be directed towards the straight section of the workings? A Yes.
- 6920 Q That is, bad ventilation? A Yes.
- 6921 Q Mr. Jones Smith? Q Did you ever tell Richardson whether you found gas there? A That is over twelve months ago, when I wanted the Richardson, and I never thought of gas. Gas was not in my head at all.
- 6922 Q Mr. Smith? Q You had not seen gas when you were working under Richardson? A No.
- 6923 Q Mr. Wade? Q Where you found the smoke was bad in No. 4, did you do any cutting there? A No.
- 6924 Q You asked upon the powder to get your mail down? A Yes; of course, we did not live a great many shots there; it was a good place.

0024. Mr. Loughton: He did not give the name of the Inspector who released the cat through.
 0025. Mr. Grooms: Who was the Inspector who suggested the cat through? A. I do not know his name.
 0026. Q. Is it the Inspector who is going round at present? A. Yes.
 0027. Q. Mr. Watson? A. I think so.
 0028. Q. Or Mr. Bayne? A. No; Mr. Watson.

[Witness left.]

Mr. ALFRED GLEESON was sworn, and examined as under—

Examination by Mr. Loughton—

0029. Q. What is your name? A. Alfred Alfred Grooms.
 0030. Q. What are you? A. A miner at Mount Kenna.
 0031. Q. How long have you worked in Kenna? A. I have been at Kenna a couple of years. I was there some time ago for about twelve or eighteen months, and the last time I went back I have been there a little over two years.
 0032. Q. Have you worked in any other pit besides Kenna? A. No; only Kenna.
 0033. Q. Have you discovered gas at any time in Kenna? A. Yes; I have.
 0034. Q. Take the occasions separately, and tell me the particulars? A. The first time I saw gas there we had in a shed, and had gone out into another shed, and when the cat went we heard a terrible screaming noise—I thought it was the cat falling in, again, and some of them said it was the powder going off. I did not know what it was.
 0035. Q. How long ago was that? A. That would be about two months ago, I think. It may be a little more.
 0036. Q. After that? What happened after this screaming noise? A. We saw the flash from where we were standing; we saw the flash of light.
 0037. Q. Where did the flash come from? A. From the rat-thrower we were driving, it flashed out into the road.
 0038. Q. How far out into the road did it come? A. It did not come far. It just landed, so that we could just see it.
 0039. Q. What was the colour of the flash? A. That I could not say. I did not take much notice.
 0040. Q. What did you do after you saw the flash? A. When it stopped or went back to me what was the matter, and went in to look, and the cat had landed on the road down all right. We went up towards the face, and we saw the coal all like as if it had been lit.
 0041. Q. Did anything happen after that? A. No, nothing particular just about that time. We went on working as usual.
 0042. Q. When was the next occasion you saw gas? A. I suppose it would be, perhaps, a fortnight or three weeks after that again, or more or I could say. I could not say for certain. We had a shot, and we both walked out into the other shed, and about five minutes after it went off my mate was in the shed, and I went and sat down and had a bit of lunch, and I was not long to there when he came running up and said, "I have lit the rat," and I, and Mr. Sullivan, and another young fellow named Brown, we ran to see. When we got down he told us he had landed it out with his bat, and we said, "Where did you light her?" and he said, "Over there," and he was just holding up his light for us to see and the light appeared.
 0043. Q. When she lit up again how far was the light off the face of the coal? A. Somewhere about 1 yard, I should think.
 0044. Q. And what was her first? The face of the coal, or the roof, or what? A. Well, the roof, you see, had blown off about half way up, and there was a real earthquake, and it seemed to be underneath that that it went, and the faces seemed to dip out up on a crash, up behind that again.
 0045. Q. How long did that you remain there? A. When we saw it then?
 0046. Q. Yes? A. Oh, about two or three seconds, that is all.
 0047. Q. And did it burn itself out, or did he put it out? A. It burnt itself out.
 0048. Q. Do you know whether any report was made about that? A. Yes.
 0049. Q. To whom? A. We told the wharves.
 0050. Q. Who told the wharves? A. My brother.
 0051. Q. What is the name of the wharver? A. Harold Dobson.
 0052. Q. And after that? A. He went out and told the deputy, or under manager, wherever he may be named.
 0053. Q. Was more told? A. Mr. Jubb.
 0054. Q. What is Jubb? A. I think he is under manager.
 0055. Q. What did he say? A. He came on, and he looked at the gas, and appeared as though he could not see it.
 0056. Q. What did you tell him? A. We told him that the gas had lit up, and he said, "Where?" and we showed him where, and he put his lamp to it, and he appeared as though he could not feel any gas at all.
 0057. Q. What sort of a lamp had you? A. I think you call it a Darg lamp.
 0058. Q. What did he say? A. He said he could not feel any gas. He held all over the roof, and about the coal with the lamp, and then he asked us to bore a hole. So we bored a hole into the opposite side of the face, and when we had finished the hole he put his lamp up to the hole, and he said, "Oh, there is nothing worth speaking about."
 0059. Q. Did you notice what effect there was on the lamp? Were you watching it closely? A. No, I could not tell. I do not remember that moment at all.
 0060. Q. You do not know how to detect gas with the lamp? A. No.
 0061. Q. Did you notice a small blue cap come on to the top of the lamp, on the top of the flame? A. No, I did not notice it at all.
 0062. Q. Did McDonald come in then? A. Yes; and he was there when Jubb was trying for the gas.
 0063. Q. Did he say anything? A. He said it must have been the smoke. "The candle," he said, "consumes gas, and it must have been the smoke."
 0064. Q. Was there any smoke there at all when he said it must have been the smoke? A. There was no smoke when we went back.
 0065. Q. There was no smoke when it lit? A. No smoke when it lit.

Woods—A. Gleason, 21 January, 1932.

- 8065 Q Was there any other occasion when you discovered guns? A Yes; there was another occasion a few days afterwards. I went in after we had fired a shot, and I lit, and burnt out the? I was loaded about five rounds.
- 8067 Q How long was it after the shot had been fired before you went in? A Fully five minutes.
- 8069 Q And how long did it take on that occasion? A In that you shoot about half way up again; then I was going up with my lamp, and saw all the men lying on the floor, and went up to try to work my way in as to whether it was safe to go near it or not, and as I did so the flame caught my light.
- 8070 Q Where was your light? A On my head.
- 8072 Q These the men hit the gas from the roof? A It was there; but it was down underneath.
- 8073 Q Did it have long? A About four or five seconds.
- 8075 Q Did you make any report about that? A When the deputy came in I told him about it.
- 8076 Q What? A Mr. McDaniel.
- 8078 Q What did he say? A He said it must be the smoke after the shot. He assumed for gas and could not find any, and he said "There is no gas here now."
- 8079 Q Did you say anything to him? A I said to him, "It is possible too much would light like that. I said, "It was a little light." I said I put me in mind of my page when he would be burning gas over a galling at Christmas time.
- 8080 Q Was there any smoke there on that occasion when you lit it the third time? A No.
- 8081 Q Was there any other occasion? A No.
- 8082 Q Have you ever had a smoking lamp in your hand in use? A No.
- 8083 Q Do you use your own shot? A Yes.
- 8084 Q Is there any shot when you fire there then? A At that time there was not; but at other times I have been in places where I could hardly see for the shot.
- 8085 Q Was this before you fired shot, or after? A We were not allowed to fire shot there. They stopped us. Then while we were working — [interrupted]
- 8086 Q Do you know why you were not allowed to fire then? A No.
- 8087 Q Who stopped you? The deputy.
- 8088 Q Did you see him why? A I do not think we did see him why.
- 8089 Q Had you any reason for not taking him? A Well, the shot was so bad that we came to the conclusion ourselves that the shot was the cause of his stopping us. It was mostly duty.
- 8090 Q And how long had it been working duty and you firing shot? A I think about a few weeks before the explosion, just about that time, with the way we had, we got out of our reasoning.
- 8091 Q You think it was a few weeks before the Knolls explosion? A Yes.
- 8092 Q And was it after the Knolls explosion that he stopped you firing the shot? A Yes.
- 8093 Q Can you tell us where that place was in Knolls? A It was what they call "Up the Jump."
- 8094 Q What district? A In the Jump District.
- 8095 Q What number? A The number of the place was where we were working then I really could not say.
- 8096 Q Do you know whether the firing was stopped because it was the shot, or because of the danger from the shot that was there.
- 8097 Q Mr. Wade? What is only guess-work.
- 8098 Q How long had this shooting been going on, with the shot there, before the explosion? A Well, you see we had drilled the place a few weeks before the explosion, and we had only fired about two or three shots in it, because it did not need much firing.
- 8099 Q When you fired the shot, did any of the shot light or all? A I did not see any light.
- 8100 Q Did you know it was dangerous to fire shot, with shot about the floor? A I had no idea it was.
- 8101 Q Was any water put about that shot while you were firing shot? A No.
- 8102 Q Was water put anywhere when you were firing a shot in Knolls? A No.
- 8103 Q And now, is there any shot in the place where you were working? A No, no shot.
- 8104 Q Is it worked there? A No, we never shoot.
- 8105 Q Is it a dump part of the mine? A It is rather inclined to be dump. It is near to the surface.
- 8106 Q Are there many dump places in Knolls like that you speak of? A Well, I have not worked in many myself.
- 8107 Q Do you know whether there are many? A There are a few. We have been working in a few places where it has been dump.
- 8108 Q Have you ever had any of these worked? A Not to my knowledge. I have seen them working in the main road, but in this particular place where we had so much shot, it was up a very steep place and they could not get the water up to it.
- 8109 Q You do not know whether they ever tried? A I believe they did. The mine could not pull the water up.
- 8110 Q And then, when the mine could not pull the water up, they put in a rig? A Yes, and stopped in the main headings.
- 8111 Q What sort of condition was it in those places where you were—good, or bad, or all right? The air was pretty good in that place.
- 8112 Q Have you worked in places where the air has not been good? A Yes.
- 8113 Q Where? A In No. 4 section.
- 8114 Q What do you say about that? A We were there on the right shift in one quarter, and you could on down and the proposition would turn off you sitting down.
- 8115 Q What fact? A It was so hot.
- 8116 Q Was there anything else, besides the heat of the air, atmospheric? A Yes, there was the smoke when we fired a shot. When we last went in the smoke would be there, and would be there when we worked on sometimes, and would never leave.
- 8117 Q And did not you do anything yourself to stop that smoke? A We would take our shots and fix it that way.
- 8118 Q Condition by the shot? A It would not shift it much.
- 8119 Q Did you make any complaint about these conditions? A We have told to the night boss that it was very hot down there, and the air was not in working condition.
- 8120 Q When was that to? A Mr. Richardson.

1917. Q And what did he do or say? A. He said the farmer man had the farmhouse in good order, when he was around there. We thought it was the farmer man had gone to sleep.
1918. Q You were satisfied from what he said that the farmer man was awake? A. Yes.
1919. Q Is that the only explanation he gave you? A. That is about all he said.
1920. Q How many roads out of Kairo do you know? A. Four. Three that we are allowed to travel and the other that we are not.
1921. Q Could you find your way out on the other one that you are not allowed to travel? A. Oh yes, I could. It is the tower track.
1922. Q Now, in doing anything that you wish to say about the conditions of the ventilation of Kairo? A. No.
1923. Q Did you ever see Mr. Glines in this empty place? A. Yes.
1924. Q Did he make any remark about the window? A. Oh no, I never saw him in this empty place.
1925. Q Where did you see him? A. In the dusty place.
1926. Q Did he say anything about the dirt? A. He said it was very dusty. It made him cough a little when he first came in, so we were just killing a ship.
1927. Q Did he say anything about shifting you? A. He told me to get a cut through over to someone possible.
1928. Q At that time how far was the cut through away? A. I think it was pretty close to 50 yards.
1929. Q And what about the brothers? A. The brother was kept up pretty well. They kept the brother up pretty late—not as well as they kept it up after, though.
1930. Q You mean after the explosion or homicide? A. After the explosion.
1931. Q Have the conditions improved at Kairo since the explosion? A. Wonderfully.
1932. Q At the present time are you getting enough air, or is there smoke hanging about your place still? A. When I see it present there is any amount of air. We get the fresh current of air that comes into the main.

Cross-examination by Mr. Frank Smith—

1933. Q You know nothing, I suppose, about opening here yesterday afternoon? A. Not the slightest.
1934. Q You were never asked to come? A. No.
1935. Q You simply got a subpoena when you came here? A. When I came home from work I got a subpoena.
1936. Q And you have not been to the same since? A. No.
1937. Q You have spoken of a dusty place, and a smoky place, and a place in which you saw gas? A. Yes.
1938. Q How do you describe the one which you call smoky?—which part of the main? A. In No. 4 section.
1939. Q And the place that was dusty? A. In the dump section.
1940. Q And the place where you saw the gas on two occasions? A. On the Old Straight section.
1941. Q They are all different places? A. All different sections.
1942. Q And I understand that, upon two occasions on which you saw gas, it was five minutes after the shot had gone off? A. Yes.
1943. Q That is to say, you had heard the shot; is that there was no doubt that it was not the shot which you saw? A. No.
1944. Q But it was five minutes afterwards? A. Yes.
1945. Q And, when you saw the light come round the corner, might that have been the light coming from the shot—a red light? A. It lasted too long. I cannot see that the powder would last so long. It was with a shortening light, for a few seconds.
1946. Q How long did it last? A. It lasted a few seconds.
1947. Q Do you know there were no changes to go off on one of those occasions? A. Yes; there were.
1948. Q In your opinion, would that have amounted for what you saw? A. Well, at the time I thought perhaps that may have been the case.
1949. And you mean, say 45 seconds, in the course of the time that time round the corner, from the usual flame? I suppose you have often seen the light come round the corner from a shot when you have got off of the way? A. No, never.
1950. Q You have never seen it before? A. No.
1951. Q Then then was certainly some appearance, to see the light coming round the corner in that way? A. Yes.
1952. Q When you got back after the shot, and saw the column of the coal, what color was it? A. It seemed to be white.
1953. Q Have you talked these matters over with your brother before you came here? A. Well, we had, and much talk about it. Of course, when I got the subpoena I asked him did he get a subpoena; and he told me "yes".
1954. Q But have you talked these matters over as to what evidence you were going to be asked for? A. No.
1955. Did you know what you were going to be asked about? A. No, I did not.
1956. Q Until when? A. Until I came to the Court.

Re-examination by Mr. Wade—

1956. Q You had no idea? A. Well, only just from knowing—[interrupted]
1957. Q Did you know you were going to be asked more questions about seeing gas? A. No, I did not.
1958. Q Knowing what? A. That Mr. Glines was at the Court, and when I got the subpoena I assumed that that must be what brought me here. I could not see what else it would be.
1959. Q And you asked actually? A. No.
1960. Q How much of thermal in you say was white? A. Oh, just around the back, the end you were the top.
1961. Q You mean along the face? A. Yes, along the face, and a little bit along the rib too. It was not a great lot of white.
1962. The way that was a sign of smoking? A. Yes, it appeared to me to be so.
1963. Q How often do you know of the dignity being told there was gas in this place? A. He knows we have told him about seeing gas twice, and we have told him about the other occurrence too.
1964. Q How often did he remember the place? A. Every day.
1965. Q Did you say he made some special examination after you reported? A. Yes.
1966. Q How often did he do that? A. Only the once.
1967. Q You have told us of three at all events—you say he came in on one occasion, and asked you to burn a hole? A. That was on the next day. I said that all the time examination.
1968. Q On one occasion he specially examined the hole you had bored in the last? A. Yes.

- 7070 Q. And on another occasion he made an examination, when you told him there had been gun fire, did he
 he, you say you saw it there then? A. Oh yes. When I saw it myself, McDonald examined, but this
 was only on the usual every day examination.
- 7071 Q. And who was it examined the hole that was bored? A. Mr. Joly.
- 7072 Q. Was McDonald there then? A. Yes. McDonald was there.
- 7073 Q. Did you say that James was never in this place where the smoke was bad? A. I never saw him
 there. It was on the night when I was working there.
- 7074 Q. Who was working there with you? A. My brother.
- 7075 Q. Did you go in at the same time? A. Yes.
- 7076 Q. Did you come out together? A. Yes.
- 7077 Q. Did he tell you to stop using so much powder? A. He never told me that.
- 7078 Q. Are you sure of that? A. Yes.
- 7079 Q. Was any complaint made of your using too much powder? A. Yes, by Mr. Richardson, that he
 was doing shots in some loose cases there one night. I do not know whether he told it to all that
 were doing too much powder, or to some other man, and the other men told us.
- 7080 Q. Did he complain of your using too much powder on this occasion? A. No.
- 7081 Q. Did you use less powder after that? A. No.
- 7082 Q. Which do you mean, when you say you fired shots among loose and? A. He seemed to think
 should get it within shots there.
- 7083 Q. You did not do any cutting there, did you? A. Yes; we used to do a little cutting there.
- 7084 Q. How deep did you go? A. According to the feeling. If I had a feel of being, I would do
 that of cutting. If I had 3 feet of being, I would do 3 feet of cutting.
- 7085 Q. How deep did you go? A. Generally about it.
- 7086 Q. That is correct? A. That is correct in one sense.
- 7087 Q. It is all the same to you, you got paid just the same? A. Yes.
- 7088 Q. Now, did not Mr. James complain to you that you used too much powder? A. Not to us; I have
 heard of it since that day.
- 7089 Q. And you never saw the smoke as thick that Mr. James could not find his way, and tripped, or
 anything like that? A. I believe I did on one occasion.
- 7090 Q. Did not James then tell you you were using too much powder? A. He told the men in the mine that.
- 7091 Q. He never told you? A. We were present. My mate was just arguing the point there with him
 about something.
- 7092 Q. Did he tell you and your mate that you were using too much powder? A. No.
- 7093 Q. Was not he speaking to you? A. He was speaking to the men in the other bord, and told them
 not to be any more shots, except at least of time.
- 7094 Q. Did he give any reason for that? A. Yes that I know of, except that he hurt his toe when he
 kicked it.
- 7095 Q. Do you think that is why he told them not to fire a shot? A. Yes.
- 7096 Q. Because he hurt his toe? A. Yes, he could not see for the smoke.
- 7097 Q. And that is the reason he told them not to fire the shots? A. Yes.
- 7098 Q. Is that the place where the shot was bad? No.
- 7099 Q. Was the smoke so thick as all that—that he could not see where to put his foot? A. It was. I
 have seen the smoke so thick that.—[Interposed]
- 7100 Q. I am not asking what you have seen. I am asking was it so on that occasion? A. Yes; the
 smoke was very thick on that day.
- 7101 Q. What was the size of the place that when your brother pointed it out to you? A. He had told
 in himself, before.
- 7102 Q. He had been in, and he told you that the place had lit, then he went back and pointed out where
 it was lit, and it lit again. A. Yes.
- 7103 Q. How much time was there then? A. There was a fire just lit up, about the size of a candle
 under the roof, and gradually went away there.
- 7104 Q. Did not it spread to the roof? A. No, it did not go to the roof at all. It went under the roof.—
 [Interposed]
- 7105 Q. It just went in straight? A. Yes. [The witness then retired.]

CLIFFORD HAMMON was sworn, and examined as under:—

[This witness was called by the Commission, who asked Mr. Bruce Smith, as a matter of convenience, to
 conduct his examination (verbal).—

Reminding by Mr. Bruce Smith:—

- 7106 Q. What is your name? A. Clifford Hammon.
- 7107 Q. What are you? A. A wheelie.
- 7108 Q. And you were engaged in the Mount Kemble Mine at the time of the explosion? A. Yes.
- 7109 Q. Are you a wheelie? A. Yes.
- 7110 Q. What part of the mine did you do your work in? A. No, I did right.
- 7111 Q. Just tell me what happened to you when the explosion took place? A. I was sitting down at the
 time of the explosion.
- 7112 Q. Whereabout? A. Where I was wheeling in the dirt.
- 7113 Q. I would like you to show us that,—I suppose you understood a simple plan of the mine? A.
 Yes, looking at map, I was writing here. This was No. 33.
- 7114 Q. You were sitting by the cut through? A. Here, yes.
- 7115 Q. That is the first cut through beyond the 5th Right reported? A. Yes.
- 7116 Q. You were at the mouth of the cut through? A. Yes.
- 7117 Q. Which side of the head were you sitting? A. On the right hand side, going in.
- 7118 Q. That is what you position (condemning position on map)? A. Yes.
- 7119 Q. Which side of the cut through? A. The outside side.
- 7120 Q. You were sitting down,—along what—having lunch? A. Having nothing.

- 7112 Q What happened? What did you hear, or see, or feel? A The last thing I heard was just like a rushing noise, and like at the next instant a gust of wind came, and that's all.
- 7113 Q From what direction? A From under the main to mast or the travelling mast.
- 7114 Q Do you mean the travelling mast behind you? A Yes, down below.
- 7115 Q Do you mean coming into No. 1? A Coming up the rope, yes.
- 7116 Q You felt a gust of wind, you are clear as to the direction you felt it,--what way was it going? A This way--(indicating).
- 7117 Q We will go to that as exactly as possible.
- 7118 Q Mr. Brown? I understood you were in the hold a little way? A Yes.
- 7119 Q And it would come up the hold to you? A Yes.
- 7120 Mr. Brown asked? Q It came up the way you show from the south? A Yes.
- 7121 Q Now, that is immediately where the scumming? A Yes.
- 7122 Q Was there anything else with the wind, any sort of smoke? A There was very much of dust (here--some dust like smoke). I was covered in that, and it was hot.
- 7123 Q What did it do to you, when effort had it no just? A It blew me down where I was sitting to about 5 yards away.
- 7124 Q It really scared you badly? A Yes.
- 7125 Q Mr. Brown? I asked you were? A Here me straight out.
- 7126 Mr. Brown asked? Q As you tell? A Yes.
- 7127 Q Stopped you as you tell? A Yes.
- 7128 Q And you found yourself 5 yards away? A Yes.
- 7129 Q Were you lodged against the wall or the side? A No, straight in the middle of the rope, (An exclamation as it moved up).
- 7130 Q Were you braked about? A A little bit. My arms and the back of my neck were cramped.
- 7131 Mr. Brown asked? Q On the left side? A Yes, on the side. (He is indicated).
- 7132 Mr. Brown asked? Q Were you facing the opposite side of the hold at that time, when you were sitting down? A I was sitting on the left hand side, and looking straight across.
- 7133 Q At the right side? A Yes.
- 7134 Q What happened after you were blown 5 yards? A As soon as I got my senses a bit I sang out.
- 7135 Q Were you somewhere from the force of the wind? A No, stand like.
- 7136 Q What did you say? A I sang out for some reason to come down to where I was.
- 7137 Q The names of the names? A Lawler and McKelvey.
- 7138 Q Did they come down immediately? A Yes. After they came down I said to them--they wanted to know what had happened--I did not know. I said, "Come down here and have a look at the horse." The horse was lying down.
- 7139 Q Where was the horse when you were sitting down? A I got below me, between me and the main rope run as the lead bar.
- 7140 Q Which way was it placed? A He was laid oblique.
- 7141 Q He was lying up towards the mast? A Yes, looking up towards the mast.
- 7142 Q What happened to him? A The last I saw of him he was lying down on the side of the mast, when we left there.
- 7143 Q That is where you said, "Come down and have a look at the horse"? A Yes.
- 7144 Q You said not see the horse then from where you were sitting? A Before the explosion.
- 7145 Q After the explosion? A Oh, no.
- 7146 Q How far down would he be? A Five or 6 yards.
- 7147 Q You had gone up to meet them then? A Yes.
- 7148 Q And you said, "Come down and have a look at the horse"? A Yes.
- 7149 Q How did you find the horse placed? A Lying down.
- 7150 Q In the same place where you left him? A He was shifted across the mast, and lying down across the mast.
- 7151 Q And on top of where he had been, or laid? A Laid.
- 7152 Q He had been down in the same direction as you? A Yes.
- 7153 Q Only he was down across the mast? A Yes.
- 7154 Q And as near as you saw he had been down 10 yards? A Yes.
- 7155 Q When he was standing looking had he been down 10 yards? A Yes.
- 7156 Q Did he become on when you saw him lying down? A Yes, just the same.
- 7157 Q Was he braked when? A We never stopped in the. As soon as we had a look at him, Lawler said, "We are dead, but get out of this." And we went then.
- 7158 Q Which way did you go? A We went straight out at No. 30, until we came to a cut-throat, and straight out of that.
- 7159 Q You went up hard No. 30, and then out by the daylight there? A Yes.
- 7160 Q Had McKelvey and Lawler anything to say about it then? A Yes, but they expressed anything? A No, only a gust of wind like--just wind.
- 7161 Q And you simply went out? A Yes.
- 7162 Q Did you see anything else? A Oh, we saw about twenty or twenty five men going out.

(Cross-examination by Mr. Wade.)

- 7163 Q How long after you first heard the scumming did you get blown away? A The shock came almost the same instant.
- 7164 Q Do I understand that you were being sideways on to the mast as it came up? A Yes; side ways on.
- 7165 Q Which side was towards the mast? A The left.
- 7166 Q Did you see any flame? A No.
- 7167 Q No light or heat? A I shut my eyes as soon as it started to come.
- 7168 Q When you were first conscious of scumming, which did you see then? A I did not see anything, only a black cloud.
- 7169 Q You did not see any red cloud? A No, no red.

Witness—C. Hanson, 21 January, 1960

- 1217 Q I suppose you discovered after wards this black cloth was fast? A That was fast and snuggly.
 1218 Q Now, was this very hot? A Yes, red hot.
 1219 Q You say there was no flame? A Well, it would burn you whenever it touched you. Of course, we was hot.
 1220 Q And still it was hot enough to burn you? Yes.
 1221 Q What were you wearing in it? A Just in pants and short-sleeved shirt.
 1222 Q Did it have any effect on the exposed parts of your body or arms? A Just like a scorching.
 1223 Q It scorched you? A It scorched me wherever I had no clothes on.
 1224 Q What effect did it afterwards have on your skin? A None. Afterwards I was all right.
 1225 Q What about your skin afterwards? A The skin all came off where it got scorched.
 1226 Q That is the outside skin? A Yes.
 1227 Q That is wherever you were scorched? A Just like it came off when you are scalded; yes.
 1228 Q Now, did you see some of these men who were dead afterwards? A Yes.
 1229 Q Did you see any skin come off any part of their body? A Yes.
 1230 Q Did it come off in the same way as it came off yours? A No; it was worse.
 1231 Q In what way was it worse? Do you mean there was more of it? A More of it, and more worse, like.
 1232 Q But what was burnt? A All their body was burnt.
 1233 Q Do you mean that there was more of the body burnt than in your case? A Yes.
 1234 Q Did you see the skin hanging loose, having some of their arms, A Yes, I saw the skin get scorched up on their arms, and they were burnt so that you could hardly tell them.
 1235 Q And were there some very black? A Yes.
 1236 Q And I suppose you were very black too? A Oh, I was black.
 1237 Q What became of your hands or your feet? A I kept them; they were on my head.
 1238 Q They were not blown off? A No, the hair was flattened to the cap.
 1239 Q I suppose the hair was slightly? A Yes, the cotton work got levelled off just like as if it was cut off with a knife.
 1240 Q The part that was outside the space? A Yes.
 1241 Q Was levelled with what? Levelled with the edge of the space? A Yes.
 1242 Q Did you examine your hair six days afterwards to see if he was singed? A I looked at him afterwards. He did not appear any the worse for it.
 1243 Q He is better now, and working? Yes, I am working with him now.
 1244 Q Did you examine him to see whether the hairs under the jaw were singed or not? A No; I just stand at a distance and looked at him in the mirror.
 1245 Q And then you went away from Kewble, I understand? A Yes; I went to Newmarket.
 1246 Q And you did not see him until you came back? A No.

Cross-examination by Mr. Troughton —

- 1209 Q What made you come back from Newmarket? A I expect because I liked this letter from Newmarket.
 1210 Q Did anyone write for you to come back? A No.
 1211 Q Were you asked by the management to come back? A Well, yes, I believe I was.
 1212 Q Now, look, Hanson, you know perfectly well you were? A I just remember about this. The boss of the wheeler told another wheeler to write up for me, but I never got that letter.
 1213 Q Who is the boss of the wheeler? A Adam Froom.
 1214 Q And he directed another wheeler to write up for you? A To write to me.
 1215 Q You did not get that letter? A I had left there before that letter got there.
 1216 Q Because you left had you not got word that you were wanted back at Kewble? A No.
 1217 Q Did you ever get that letter that was sent on to you? A No.
 1218 Q Never got it yet? A No.
 1219 Q Now, have you had any conversation with Mr. Rogers regarding the disaster? A Yes.
 1220 Q When and how the last conversation? A A week ago to night, I think it was.
 1221 Q Where was it? A In his office.
 1222 Q Did he send for you? A Yes.
 1223 Q Did he ask you on that occasion had you been burnt? A Yes.
 1224 Q And what did you tell him? A I told him "yes".
 1225 Q And what did he say? A I do not know. I forgot now what he said.
 1226 Q Now, just try and think what he did say when you told him you were burnt? A I could not think what he said. They took down whatever I told them.
 1227 Q Were took it down? A The clerk at the pit—Wargrave.
 1228 Q Was there anyone else present besides Mr. Rogers? A Mr. Hestibler, the underground manager.
 1229 Q Anyone else? A No.
 1230 Q Did you know what they were taking that statement down for? A No, I did not. I did not know they were taking it until they were very near finished.
 1231 Q Then how did you know? A Well, I dropped that they were taking it when I saw their writing. They were writing down as I told them.
 1232 Q Indeed you took it? A No, it took of me.
 1233 Q Could not you see them writing it down? A Well, I never took any notice for while. They were writing when I first came in there.
 1234 Q Did you sign that statement? A Yes.
 1235 Q Do you know where it is now? A No.
 1236 Q Have you altered that statement since last week? A No.
 1237 Q Did not you tell Mr. Rogers that you were burnt in other places besides the neck? A The ears, the—wrist, and the arms. Wherever there were no clothes on me I was scorched.
 1238 Q And you told him that? A Yes.
 1239 Q Now, did not you also tell him that your clothing was burnt in parts? A No, I did not.
 1240 Q Not your shirt? A No.

1941. Q Was not your shirt, near your arms here, singed? A Well, I do not think so. I never looked at the shirt, neither. But I never told him that it was singed.

1942. Q Do you know whether it was singed or not? A No, I never looked.

1943. Q Did you tell Mr. Rogers that you did not see any flame? A Yes.

1944. Q He asked you that question? A Yes.

1945. Q Now, as a matter of fact, directly you heard the sound you shut your eyes? A Yes, as soon as the gust of hot dust and stuff came.

1946. Q The question is: did you shut your eyes because you thought there was something coming, when you heard the sound, or did you shut your eyes when you found there was something coming?

1947. A When I felt it.

1948. Mr. Lysaght: Q Could not you see what was coming? A I did not want to see it.

1949. Q Did you see what was coming, or did you shut your eyes directly you heard the sound? A No, as soon as that stuff came I shut my eyes.

1950. Q Then you were it coming? A I saw it as a kind of a way.

1951. Q How long was it you saw it coming before it touched you? A A second.

1952. Q And you at once shut your eyes? A Yes.

1953. Q So that there might have been flame there, for all you know? A There might have been flame there, for all I know.

1954. Q Do you know what it was scorched you, if it was not this flame? A This hot dust.

1955. Q If there was no flame there could you account for your being scorched? A Only the dust.

1956. Q Did it burn your boots? A No.

1957. Q Did it scorch them up? A No.

1958. Q Had it any effect on your hair? A No, I do not think so.

1959. Q Now, do you not remember whether it singed your hair, just you think whether you remember your hair being singed? A Well, I was not told about its being singed, anyhow, and I could not see it.

1960. Q Did not you notice after the disaster? Did not you look to see whether your hair had been singed at all? A I never looked.

1961. Q Did you look to see the apparatus at the back of your ear? A I could feel it.

1962. Q Did you get a pain to look at that? A Yes.

1963. Q Now, what was the extent of the burning on the back of the ear—did not it burn the hair too? A That was after I went home and got a wash.

1964. Q Did not it burn the hair at the back of the ear too? A I could not see it burn then.

1965. Q Where did you see it burnt? A I did not see it burnt at all.

1966. Q Did the skin get all your neck? A Yes.

1967. Q Now, which was the noise actually heard—your own or your own? A The own. The own was the own. Your own—your own.

1968. Q Now, you might tell us this—in fact the only conversation you had with Mr. Rogers about the disaster? A Yes.

1969. Q You are clear upon that answer now, that that is the only conversation? A That is all.

1970. Q Have you had any conversation with any other officials about the disaster—officials of Kinkaid Mine? A No, I have not.

1971. Q When did you know that you were to come as a witness here? A I did not know until last night.

1972. Q Did not Mr. Rogers tell you you were wanted? A Mr. Rogers gave me a lot of no idea, you know.

1973. Q When did he tell you? A He told me that I might be called.

1974. Q Where? A Home. He told me that, the night I was there.

1975. Q Will you tell me what was in that statement that you gave to Mr. Rogers? A Something the same as I have given here today.

1976. Q Was there anything that you told him that we have not got out from you,—try and think carefully. Was it only a week ago? A I did not tell him any more.

1977. Q Who was it asked you to go into Mr. Rogers' office? A Adam Frost.

1978. Q And did he tell you what sort of statement you were to make? A No, he did not tell me anything—and when I was going home that night I saw Mr. Rogers, and I asked him what he wanted me for then, and he would not tell me. He said, "Come to the office at 7 o'clock," and I did not know what he wanted me for until I got there.

1979. Q Why did you leave Mount Kinkaid? A There was not much work. There were only about two days' work a fortnight after the explosion.

1980. Q Could you not be put on helping to clear the roads? A I was doing that; and there were too many men, and I could only get two days a fortnight.

1981. Q Were you discharged, or did you leave of your own accord? A I left of my own accord.

[At 1 p.m. the Commission adjourned for luncheon.]

AFTERNOON

(On resuming at 2:15 p.m., Mr. W. R. Pratt attended to taking and reading notes of the evidence and proceedings.)

CLIFFORD HAZENON, previously sworn, was further examined as under:—

1982. Mr. Lysaght: Q Did you have any conversation with any of the officials that night? A Only with the underground manager, when he told me to come home.

1983. Q You have not been subpoenaed, have you? A No.

1984. Q Who is the underground manager? A Mr. Haskins.

1985. Q By his direction, you came here? A Yes.

1986. Q Is that all he told you? A That is all.

1987. Q As the interview with Mr. Rogers, Mr. Haskins, and Mr. Warburton, who did the writing? A Mr. Warburton.

Witness—C. H. H. Jones, 21 January, 1926.

- 1218 Q Did he ask you any questions, or did you give a statement? A I gave a statement, and a few questions were asked.
- 1219 Q Did he ask you whether you had ever seen any gas in Kamble? A No, they never asked me that.
- 1220 Q Do you remember seeing Mr. Bates or Mr. Nelson before the explosion? A Yes, ten minutes or a quarter of an hour before.
- 1221 Q Where were you then? A I was sitting down at the same place as I was when the explosion happened.
- 1222 Q Did they speak to you? A They said good day.
- 1223 Q Which way did they pass? A They went out of the backgate road into the main tunnel.
- 1224 Q Do you know what time it was when they passed you? A Somewhere about 1 o'clock, I expect, I cannot say in a few minutes.
- 1225 Q Do you remember how long it was after they passed you before you heard anyone? A About ten minutes or a quarter of an hour.
- 1226 Q Do I understand you to say that your lamp was blown out? A Yes.
- 1227 Q Did you notice any smoke? A There was a smell.
- 1228 Q What was it like? A It was like smoke or steam. I cannot describe it.
- 1229 Q Did it smell like sulphur? A No.
- 1230 Q Did you ever notice it before? A No.
- 1231 Q Did it smell like smoke? A Yes, like the smell of new kerosene.
- 1232 Q Did you notice any lanterns smothered or burnt? A No.
- 1233 Q Did you notice whether the lantern was torn off the frame? A No, I never noticed.
- 1234 Q You told us that a number of men were there; a good deal worse than you. Who were they? A F. Smith was one. That was the only one I noticed.
- 1235 Q Do you know where he was working? A On the left-hand rope road, somewhere there, from what I can tell.
- 1236 Q You do not know of your own knowledge? A No.
- 1237 Q Did you notice which way he was working? A Yes, he would be going the way I went down every night.
- 1238 Q Did you travel that road daily? A Yes.
- 1239 Q Is that the only way you know out of the mine? A The travelling road and daylight heading.
- 1240 Q Those are the only two ways? A Yes.

Re-examination by Mr. Bruce Smith:—

- 1241 Q You told us where F. Smith was working; was it No. 91 on the plan? A I think that is Charles Smith.
- 1242 Q What did F. Smith do there? A He was a digger.
- 1243 Q Where would his work be? A Oh, it would be about half a mile away.
- 1244 Q In No. 11? A In No. 1, on the left road.
- 1245 Q Near the telephone stand—by you? A Half a mile from me.
- 1246 Q Do you know where the body of Nelson was found? A No.
- 1247 Q Tell me the points between which F. Smith would work, as near as you can? A (Looking at map) Between Smith's Flat and No. 1 main level.
- 1248 Q He only came half way down? A He did not go up to the main level.
- 1249 Q Is it a fact that he was working near the telephone stand? A His work was not near that place.
- 1250 Q Do you know that his work was between Smith's Flat and No. 1 main level? A No.
- 1251 Q Was your work and his connected? A No.
- 1252 Q Did you meet him? A No, we used to meet there.
- 1253 Q At that time? A Yes.
- 1254 Q Where did you see him this last time? A Outside.
- 1255 Q After the thing was over? A Yes, the next day.
- 1256 Q Do you know that he was found near the telephone stand—actually in it? A No, I did not.
- 1257 Q You saw whether you saw anybody hurt more than you were? A That boy was.
- 1258 Q How was he hurt? A He was hurt till all the flesh was pored on his body.
- 1259 Q Do you mean right open? A Crushed and broken.
- 1260 Q Did you see his head? A I never took any notice of his head.
- 1261 Q What clothes had he got on? A Just a pair of pants and his boots.
- 1262 Q Where you saw the flesh had parted—was it on the chest? A I saw his body—no head.
- 1263 Q Do you mean crushed, or was the skin hanging off? A Crushed and hanging off. He was terrible.
- 1264 Q What colour was it? A Black.
- 1265 Q Was there any coal dust on it? A He had coal dust all over him.
- 1266 Q Now how long were you with Mr. Rogers over this affair? A About an hour, I should think.

Cross-examination by Mr. Wade:—

- 1267 Q I want to ask you about this. Did you tell what you knew about the matter when you were asked? A Yes.
- 1268 Q Did any one of those three gentlemen ask you to say anything that was not true? A No; and what I gave I gave at my own free will.
- 1269 Q How long had you been back at Kamble before you saw Mr. Rogers? A About a week and three days.
- 1270 Q With regard to Frost, the last contractor, is that Adam Frost, senior? A No, young Adam Frost.
- 1271 Q Were you quite like before the explosion? A Yes.
- 1272 Q His father is mentioned in the mine? A Yes.
- 1273 Q With regard to Charles Smith, the man working on the No. 11 right, did you see which way he went out? A The same way as we all.
- 1274 Q Through the daylight heading? A Yes.

Examined by Mr. Bruce Smith:—

- 13496 Q Were you asked to give evidence at the Queen's request? A No.
 13497 Q You were not here then? A Not at the beginning, I was here for the first couple of days, and then I went away.
 13498 Q Did you come to the Court? A No.
 13499 Q Were you ever spoken to about it? A No.
 13500 Q By nobody? A No.
 13501 Q Did you make any statement up to the time that you went away? A No.
 13502 Q Had you spoken to anybody connected with the case? A No.
 13503 Q Had you offered yourself as a witness? A No.

Examined by Mr. Wilson:—

- 13504 Q What first informed you that the Manager wanted to see you, or for you to make a statement?
 A John Ford.
 13505 Q Did he tell you while you were at work during the day? A No; Jack Morgan told me the first time, and then afterwards.
 13506 Q What were the exact words he said to you? A He just told me that Mr. Rogers wanted to see me at the office at 1 o'clock.
 13507 Q Did he tell you what it was about? A No.
 13508 Q Do you know Charles Smith? A Yes.
 13509 Q Do you know that he gave evidence last? A Yes.
 13510 Q Was it before Smith gave evidence, or afterwards, that you were told? A Afterwards.
 13511 Q Did Mr. Rogers ask you, or did any of the officials ask you, whether you had read what Smith said? A No.
 13512 Q Did they make any reference to what Smith had said? A No.
 13513 Q They did not say anything about what Smith had said? A They told us something about Smith telling them that he had found out. He had come down and found me—I would not be sure what it was—and that he took a lot of men out, and that he found a way out for them.
 13514 Q Did they not say whether it was correct? A They asked me what I knew.
 13515 Q Did Mr. Rogers tell you that they intended taking down or writing what you were saying?
 A No.
 13516 Q You only discussed that they were taking it down? A Yes, the clerk was writing when I went in. I did not know that he was writing my statement. When I went in he got another slip of paper, and wrote down what Mr. Rogers asked me and what I said.
 13517 Q Did Mr. Rogers tell you why he wanted you to sign it? A No.
 13518 Q What did he say? A He asked me to sign it, and I read it and signed it.
 13519 Q It was absolutely correct? A Yes.
 13520 Q If I say I am through a message from I sent to Mr. Rogers that I got the witness here. At 8:30 as I found that Hamilton was at the mine I sent up to them to get a statement from him.
 13521 Q I do not know whether Mr. Wade would have any objection to my using this statement.
 13522 Q Mr. Wade? I will get it.
 13523 Q Mr. Manager? Have you got it here?
 13524 Q Mr. Wade? I have seen it, but I have not got it here.

Mr. WILLIAM HADLEY was sworn and examined to verify —

Examination in chief by Mr. Sprague:—

- 13525 Q What is your name? A William Hadley.
 13526 Q What are you? A A coal miner.
 13527 Q Where are you working? A At Wootton Colliery.
 13528 Q How long have you been there? A Several years.
 13529 Q Have you worked in any other colliery? A At Wellesborough, and at BHEL.
 13530 Q How long at Wellesborough? A There and a half years.
 13531 Q How long at BHEL? A About two years.
 13532 Q What has your total experience been? A About sixteen years coal mining.
 13533 Q Are you a member of the Delegates Board of the Miners' District? A Yes.
 13534 Q Did you go to Kendal at the time of the disaster? A No.
 13535 Q Well now, take the recommendations of the Board. No. 1.—"Managers, under-managers, deputies, and shot-fires, to hold certificates of competency by examination, and to have had five years' practical mining experience, before being eligible for their respective positions. Have you anything to say regarding that?" A Regarding the experience of Managers.
 13536 Q As regards that recommendation, can you say anything in support of it? A Yes, I believe they ought to have certificates. It would be for better for all of them to have them.
 13537 Q Has your Manager a certificate by examination? A I cannot say.
 13538 Q What sort of lamps have you at your mine? A Safety lights.
 13539 Q Who does the shuffling? A The miners do it themselves.
 13540 Q Has gas been discovered at Wootton to your knowledge? A Never, to my knowledge.
 13541 Q Has it the reputation of being a coal-gassy mine? A As far as I know.
 13542 Q Who is your deputy? A Joseph Fowler.
 13543 Q Do you know whether he passed any examination? A I could not say.
 13544 Q Recommendation No. 2 is that "Inspection be made with absolute power to order the use of safety lamps." A Yes, I think it would be better if the Inspectors had that power.
 13545 Q Do you know of any colliery where they desired safety lamps, and the Manager refused to have them? A No.
 13546 Q Recommendation No. 3 is, "Ventilation by furnace prohibited, and fans authorized." A Yes, I am for the fans.

Winnipeg—St. Mary, 22 January, 1915.

7397. Q Have you worked in collieries having furnaces? A Yes, at Dell and at Winnipeg.
7398. Q What was the air like at Dell? A Very good. As far as I can recollect the furnace is at Dell at the present time.
7399. Q What have you at Winnipeg now? A A fan.
7400. Q When was it put in? A Three or four years back.
7401. Q Recommendations No. 4 is that "Waste workings are to be absolutely sealed off, and unattended by active streams for fear of explosion, such streams always left to come in contact with rocks." A Yes.
7402. Q Are the waste workings sealed up at Winnipeg? A Some are, at all events.
7403. Q What with? A Some with brattice, and some with brids.
7404. Q Does the brattice let pass those waters? A Yes.
7405. Q In your opinion does that materially affect the air? A When the men are working.
7406. Q I mean where the brattice are passed the waste workings—does that make the air bad? A No.
7407. Q That has not been your experience? A No, it has not.
7408. Q With regard to No. 5—"All places, except propelling drives, to have not throughs not more than 30 yards apart." How are your air-throughs at Winnipeg? A Some are 40 yards; some are 60 yards; and I have drives placed as well 100 yards.
7409. Q Is brattice in the haul? A Yes.
7410. Q If the air-throughs were only 30 yards apart, would they weaken the roof? A I do not think so.
7411. Recommendations No. 6 is that "Inspection should be made with looked safety lamps on all occasions"; but I will just that over, and come to No. 7, which is that "A monthly examination and report be made by deputies and District Inspectors with the hydraulic flares." What do you say to that? A I think it should be done.
7412. Q Is there any examination made with looked safety lamps in your colliery? A Yes.
7413. Q Every day? The deputy comes round about 11 o'clock.
7414. Q Do you know of any examination by the hydraulic flares? A Only by the Government Inspectors.
7415. Q How long ago was that? A About a month ago.
7416. Q Do you know whether he discovered any gas or traces of it? A I cannot say.
7417. Q I will give you Nos. 8, 9, 10, and 11, and I leave you to Nos. 12, which recommends—"An extra supply of safety lamps and their requisites, equal to one-third of the number of persons employed, below ground, to be kept constantly in good order and ready for use." Have you any reserve at your colliery? A Not that I am aware of.
7418. Q Have you ever any reserve those which the deputy uses? No, only those which the deputy and Manager use.
7419. Recommendations 12 is—"Traveling and haulage roads, and other places necessary, to be properly watered." Is your colliery damp? I cannot say.
7420. Q Have you any appliances for watering? A The only watering is by hose, by water got out of the old workings.
7421. Q Are the traveling roads watered? A They are pretty wet themselves.
7422. Q Are the haulage roads watered? A These are watered by water from the old workings.
7423. Q Are the working places watered? A No.
7424. Q When you fire a shot, do you take dust? A I have seen no dust from a shot.
7425. Q I will give you Nos. 14 and 15, and come to No. 16, which recommends that the "Use of matches be enlarged." When you are down? A About a foot square.
7426. Q Is the travelling road at your colliery also the haulage road? A Not now.
7427. Q Recommendations No. 16 is—"Infringement to be given to employees regularly on the ground of smoke." How many wages do you know out of the Winnipeg mine? A One travelling road, and another road one particular. The travelling road we do not get obstructed on that. I do not think they are allowed to go on it.
7428. Q You know that road is one of danger? A Yes.
7429. Q There are the only two you do know? A Yes.
7430. Recommendations No. 17 is that "The Coal Mines Act should forbid a black list of employees being kept, and providing complete prevention of discharged persons obtaining employment." Can you give us any instances where people have been prevented from obtaining work? A I cannot.
7431. Q You support the recommendations? A Yes.
7432. Q If such a provision is made, would it cause the men to report what they observe? A Yes.
7433. Q Do you know whether the men have in the past abstained from reporting? A I have heard of it.
7434. Q Is it your experience? A No.
7435. Q You have heard of it in your own colliery? A Yes.
7436. Q Recently? A Yes.

Cross-examined by Mr. Bruce Smith—

7437. Q You were at Dell ten years? A It is nine or ten years since I was there.
7438. Q I thought you said that you were there ten years—how long were you there? A Well, I was there nine or ten years. I was 15 years old when I started.
7439. Q During that time have you any reason to complain of the ventilation? A No.
7440. Q The mine was well ventilated up? A Yes.
7441. Q You cannot remember a case of the air coming suddenly, so that you had to complain of it? A No.
7442. Q There was a furnace in that mine? A Yes.
7443. Q Winnipeg had a furnace? A It had previously.
7444. Q There is a fan there now? A Yes.
7445. Q You say that there are some places where there are 100 yards between the cross-roads? A There drives there were.
7446. Q Have you had reason to complain of the ventilation there? A Once.
7447. Q How long ago? A Two years.
7448. Q Was that place well ventilated up? A It was very narrow. We were driving a 7 foot heading; the brattice was close to the head.
7449. Q How long were you at it? A Twenty well nine months.
7450. Q You only complained once during nine months? A I did not make a pretence of complaining.
7451. Q There was only one occasion on which you felt disposed to complain? A Yes.
7452. Q Was that remedied at all? A No.

2505 Q Then you say that a fence was put up across the heading from which you and your mate had been withdrawn, and that the air current reversed the next day as on previous days? A Yes.
2506 Q A rough check of the air current down by the wagon was shown to the Commissioner?
2507 Q Then the air was not better in the face of the board than it was at the heading that day? A No better.
2508 Q It would make no difference in connection with the examination of the mine? A No.

Re-examination by Mr. Bruce Smith—

2509 Q That fence which you speak of was an indication that you were not to go up there? A Yes.
2510 Q And that the heading was dangerous? A It was an indication that work at the heading had been stopped.
2511 Q Was there any gas there? A No.
2512 Q If there had been gas there, it would have been brought round to your head? A Yes.
2513 Q Anything as the fog would go in your head? A Yes.
2514 Q Do you know any reason for doing it up? A No.
2515 Q You say you never found any gas there? A No.
2516 Q And never reported it? A No.
2517 Q That was the only time in nine months that you had ever been stopped going there? A Yes.
2518 Q Did you ever hear any explanation of it? A No.
2519 Q Was it taken away immediately? A Yes.
2520 Q The same evening? A Yes.
2521 Q Did you ever ask why the fence was put across there? A I did not.
2522 Q Did you express any opinion to the deputy? A I did not.
2523 Q Mr. Bruce? Q Did the Inspector go up to that heading? A I cannot say. I was not there the remainder of the day.
2524 Q Mr. Bruce Smith? Q You were away to other work? A Out on the engine road.
2525 Q And you were been put on that kind of work before? A Yes.
2526 Q Often? A Not often. I might have been, three or four shifts.
2527 Q In nine months? A Yes.
2528 Q Were you kept there the whole of the shift? A The whole of the shift.
2529 Q And you never look? A The next day.
2530 Q Mr. Bruce? Q Was there anything wrong with the roof on that heading? A No.
2531 Q Mr. Bruce Smith? Q Was anything done to strengthen the roof? A No.
2532 Q Was anything done to suggest why they had taken you off—any warning? A There was only the number I put above myself.
2533 Q Had the Government Inspector been there at any time you were not working there? A No, I did not see him.
2534 Q Had he been in the mine during the nine months? A Yes.
2535 Q You say that you were working in the heading, and your mate in the head? A Yes.
2536 Q You were outside from the heading? A Yes, and put in the head, and afterwards on the engine road.
2537 Q And your mate, too? A Yes, we were both working together.
2538 Q And if the Inspector went to that place he would not find anyone working there, either you or your mate? A No.

Examined by Mr. Robertson—

2539 Q Is there anything strange in a mine being taken from his working place to do repairs? A Nothing that I know of.
2540 Q It might have been quite a legitimate instruction? A Yes.
2541 Q When a man is removed from his place, is it not the practice to put up a danger board there? A It is.
2542 Q There is nothing strange about that? A Nothing strange about it.
2543 Q What do you suggest from the circumstances you have mentioned? A There is nothing that I can suggest about it.
2544 Q You seem to imply some sort of a laid practice or a suggestive practice on the part of the management? A No.
2545 Q That was the impression conveyed to my mind. Why did you mention it? A I was asked about it.
2546 Q You seem to suggest that you were taken out and put back again for some reason? A No. I did not know that the Inspector was coming. I do not know what I was taken out for.
2547 Q The impression conveyed to my mind is, that this was done for a purpose? A I did not state that it was done for any particular purpose at all.
2548 Q There is nothing wrong about it? A Not that I know of.
2549 Q I think you mentioned for them and a half year at Helensburgh? A Three years for the first time, and the last time for about six weeks.
2550 Q You must be aware that at Helensburgh there are driven from 150 to 200 yards without cut-through? A I did not know.
2551 Q You said not know that was a common practice? A No. I never worked in those places myself.
2552 Q Where did you work? A At the top, the South Zig, the North Zig, and the Rhon.
2553 Q That is a most extraordinary circumstance, considering that this is the practice carried out to day, and cut-throughs are 100 yards, or 200 yards or more, apart? A I never worked in one, and I worked in headings.
2554 Q And you worked in headings? A Yes.
2555 Q And you did not work in headings 100 or 200 yards in length? A Never.
2556 Q Do you say that already? A Yes.
2557 Q All I can say is that your evidence is not of any value, because it is absolutely opposed to the facts.
2558 Q Well, I am not aware that I have worked on places driven 100 or 200 yards without cut-through.
2559 Q What that opinion of yours I call only say that I place no value on your evidence in other respects, because what you say is so absolutely opposed to practice? A I cannot remember any place being driven that far.
2560 Q You say that there have been driven 50, 60, or 100 yards, at Wמות? A Yes.
2561 Q And that you only once had reason to complain? A Yes.

12564. Q And with that one exception there appeared to be no defect in the construction of the plant? A No.
 12565. Q Why should not throughs be put 20 yards apart? A To carry ventilation better.
 12566. Q If the ventilation can be carried to the face by other means, there is no reason why cut throughs should be made? A The air would be carried better by cut throughs.
 12567. Q If it is carried to the face, that is all that concerns you, is it not? A Yes.
 12568. Q Did you say that any examination was made with the hydrogen lamp? A Only by the Inspector.
 12569. Q Would you be surprised to learn that an examination had been made by the Manager? A If an examination was made by the Manager, I was not aware of it.
 12570. Q Who was the Manager at the time that this occurred—I mean this supposed examination? A Charles Heath.
 12571. Q I thought it was Mr. Kater? A The Manager was Mr. Kater, and the under-manager was Charles Heath.
 12572. Mr. Bruce Smith: The witness told me the name of the Manager was Charles Heath.
 12573. Mr. Robertson: Q You said that your mate frequently complained? A Yes.
 12574. Q Was there any ill feeling at all towards your mate? A Not that I know of.

Examined by Mr. Smith:—

12575. Q How long is it since you were at Hebbworth Colliery? A Three years.
 12576. Q Did the distance between Hebbworth Colliery and the mine at Wolsingham vary, or was it uniform? A As near as possible uniform.
 12577. Q The same distance between our section and another? Yes.
 12578. Q The intake always pass the waste workings in the Wolsingham Colliery? A Yes.
 12579. Q Did you regard that as dangerous? A No.
 12580. Q There was no danger of the hot air coming out of the waste workings? A Not that I know of.
 12581. Q If any more hot, would it be carried into the general workings? A Yes.
 12582. Q Would there be any danger then? A Yes.
 12583. Q Do you think there is any danger now? A Well, I think there is.
 12584. Q How long is it since you were at the Duff Colliery? A About twelve months after the explosion.
 12585. Q Were you coal-gassing or whistling? A Both.
 12586. Q How long were you on coal? A About two years.
 12587. Q And how long on whistling? A I whistled nearly all my life, from when I first started.
 12588. Q Would that be a number of years? A Yes.
 12589. Q Your actual experience on coal at Hebbworth was two years? A Yes.
 12590. Q And, had the ventilation been defective, you would not know, you being in the air currents? A Yes, that is so.
 12591. Q Do you make that exception, that the parts of the roadway you were in were where the intake air currents were? A Yes.
 12592. Q You say that, after doing a day's work timbering the mine engine road, you went into the heading again? A Yes.
 12593. Q Was the ventilation the same as it was before you were withdrawn? A Just the same.
 12594. Q How long did you work in a head afterwards? A About a week.
 12595. Q Was there any improvement in the ventilation? A No.
 12596. Q Do you know if any improvement took place? A Not until the heading was put through into another heading. After working at the head they put in another heading to drive it up to the bottom.
 12597. Q To meet it? A Yes.
 12598. Q And so the ventilation was put there? A Yes, on the other side.
 12599. Q What was the reply generally given to you when you made complaints? A That they would try and remedy it.
 12600. Q Did you make any improvement? A Only by fixing the brattice up. But it made it no better, because the brattice was not going. There was not sufficient room behind the brattice to carry the air, so the place was only better if not I felt altogether.
 12601. Q Did the person who came to tell you on the morning say that the Inspector was coming? A No. We asked him what was the matter, and he said he did not know.
 12602. Q Who brought you out? A I know.
 12603. Q What position does he hold? A He is a coal man.
 12604. Q Did he tell you to go to the engine road and work? A Yes.
 12605. Q How long after that was it before you met the Inspector? A It would be about from half an hour to an hour.
 12606. Q How far was the Inspector from the nucleus of the mine when you saw him? A We met him about half way.
 12607. Q How long would it take him to travel from the nucleus? A About ten minutes or a quarter of an hour.
 12608. Q If the Inspector had arrived when word was first sent to you, that would be about the time it would take for you to reach the Inspector? Yes.
 12609. Q The Inspector did not ask you anything about the place? A No.
 12610. Q He did not know that you were working at it? A No.
 12611. Q Did you say that the deputy visited the place every day? A Yes.
 12612. Q Did he carry a safety lamp? A Yes.
 12613. Q Did he make any examination? A Nearly every day.
 12614. Q What did he do? A Put the lamp up to the face of the coal.
 12615. Q Every day? A Yes.
 12616. Q Does he examine the waste workings? A I cannot say.
 12617. Q Did you ever read the reports in the book at the mine? A No.
 12618. Q Do you know that you are permitted to visit the reports? A Yes.
 12619. Q So far as you know, were the waste workings inspected? A I have no knowledge of whether they inspect the waste workings or not in that colliery.

(The Commission, at 3.28 p.m., adjourned until 10 o'clock the following morning.)

THURSDAY, 23 JANUARY, 1903.

[The Commission met at the Court Street, Wollongong.]

Present:—

C. B. R. MURRAY, Esq., D.C.J. (PRESIDENT).

D. A. W. ROBERTSON, Esq., COMMISSIONER. | D. BUTCHER, Esq., COMMISSIONER.

Mr Bruce Smith, Barrister-at-Law, instructed by Mr Ward, Crown Solicitor's Office, appeared on behalf of the Crown.

Mr A. A. Atkinson, Chief Inspector of Coalminers, assisted Mr Bruce Smith.

Mr A. A. Trought, Solicitor, appeared on behalf of—

- (a) the representatives of deceased miners, widows, &c., (victims of the explosion);
- (b) the employees of the Mount Kembla Colliery Company, (miners, &c.), and
- (c) the Mount Kembla Colliery Employees' Association (the Southern Mount's Union).

Mr C. D. Wade, Barrister-at-Law, instructed by Mr F. Charles, appeared on behalf of the Mount Kembla Coal and Oil Company (Proprietors of Mount Kembla Mine).

(Mr J. Garlick, Secretary to the Commission, was present to take shorthand notes of the evidence and proceedings.)

7019 (Mr Wade informed the Commission that he had a number of witnesses to be called in Wollongong next week. He was, however, obliged to attend the sittings of the Arbitration Court in Newcastle, in connection with a case which had been put forward, and which would be resumed next week. He could not say how long that case would last, and he desired to know whether if it lasted after the conclusion of the evidence which he intended to call in Wollongong he gave evidence on matters of fact, the Commission would grant him an adjournment of a week, in order that he might be able to attend to examine the witnesses who would afterwards be called by the Mount Kembla Company to give expert evidence.

7021 Mr Bruce Smith pointed out that it was by no means certain that Mr Wade really would require the adjournment for which he asked, as the evidence, even in Newcastle, might be completed in time to allow Mr Wade to be present and call the expert evidence to which he referred without the necessity of an adjournment of the Commission. Mr Bruce Smith pointed out that he was appearing in a quite a special capacity, and was contending the witnesses solely with the object of clearing the truth. If Mr Wade would supply him with the proofs of the evidence which he (Mr Wade) expected his Wollongong witnesses to give on the matters of fact, he (Mr Bruce Smith) would be prepared to examine them with just the same eye as Mr Wade's case as if Mr Wade were concerned about himself; then he would put the proofs on one side, and would call the witnesses any questions which might suggest themselves to him from any other standpoint. Mr Wade would reply upon his witnesses being examined fully according to the proofs which were put before him.

7023 Mr Wade said he had not obtained the proofs of these witnesses yet, but he would be quite willing to put in with Mr Bruce Smith's suggestions.

7025 His Honor said that the truth of Mr Bruce Smith's contention of the witnesses as he showed that he took an independent position. There would be no difficulty about that. The Commission would set next week in Wollongong to take the evidence of local witnesses. Mr Wade's application for an adjournment was too indefinite. There had been a great deal of delay in the reception of the work of the Commission, and then (Smith) in fact it was as much as possible.

7026 Mr Bruce Smith suggested that, if Mr Wade found later on that he desired to have an adjournment, the Commission could meet specially to hear his application and deal with it then if the necessity arose.]

Mr JOHN McLEOD was sworn, and examined in order —

Examination-in-chief by Mr Sprygh.

7028 Q What is your name? A John McLeod.

7029 Q What are you? A Miner.

7030 Q Where? A Mount Kembla.

7031 Q Have you worked in the Mount Kembla Mine? A Yes.

7032 Q How long did you? A From about last October twelve months, up to the explosion.

7033 Q How long did you work there? A I reckon about nine months.

7034 Q What district? A Shaft and No. 1.

7035 Q Do you remember the explosion in the shaft district? A Yes I worked in No. 11 head.

7036 Q Now, while working there did you ever discover any gas? A Not to the place I was working.

7037 Q Do you know of gas being in the timber of that level? A Yes, I saw gas in the heading.

7038 Q What heading is that? A You can not find one with the lamp any more? A No, I am not.

7039 Q Can you tell me in whose heading it was? A McAndrew and Williams. They had worked another place and the heading was stopped. It was a cut through heading, and they were sent into that from another cut. She had not been finished.

7040 Q Can you say what part of the shaft district it was in? A It was in the right-hand shaft.

7041 Q Was it near any particular place that you can think of? A It was a heading coming in the direction of Powell's Flat.

7042 Q I will show you Powell's Flat. When you travelled in, which way would you turn off? A I turned off at No. 1 Flat heading road.

7043 Q That is No. 1? A Yes.

7044 Q Then where would you go? A I turned off No. 6 Right Repe Road.

7045 Q And then down the heading to the east. A I came along the head (evidence).

1648 Mr. Bruce Smith: Q Then you travelled along the air course, did you? A I travelled down this way. That was No 32, and that No 48, and 49.

1649 Q That is the last line of rail-branches? A Yes, this is the last line of rail through

1650 Mr. Lyngby: Q It was in three levels between the 4th, 8th, 10th Road and Powell's Flat? A It was in the heading. I worked in one of these levels, and we came out of our head.

1651 Q It is clear that it was the heading between the 6th, 8th, 10th Road and Powell's Flat? A Yes.

1652 Mr. Johnston: I do not think that heading was in operation at that time.

1653 Witness: It was between April and June.

1654 Mr. Lyngby: Q Work year? A Last year.

1655 Q Not the year of the disaster? A Yes, three or four months before the disaster.

1656 Q Tell us now Mr. what it was?

1657 Mr. Bruce Smith: The place was No 48, according to the numbers on the plan before the Commissioners.

1658 Mr. Lyngby: Q What was it you saw? A When there was a shot fired there, and we fired a shot in our place, we came out at the time they fired a shot in their place.

1659 Q Who saw "that"? A Messieurs and Williams. There shot was a standing shot. We went to have a look to see what it had done, and when we got within—well, there were three of us going, some were 5 to 6 ft from each other—and I got close to the face, within about a couple of feet of the face, and it was a cracked down the right-hand side. I just went to look at the crack, and, of course, I did not stop to see the rest.

1660 Q Did anyone else? A When the thing up? — [Interposed]

1661 Q What fired up? A Well, I thought, yes.

1662 Q How long did that burn? A I could not say, a few seconds, that is all. It just flashed out.

1663 Q How long did it flash up? A I suppose there was a flash about 3 or 4 feet high, and it would come out about 50 or 12 feet.

1664 Q How the —? A Came out along the heading. It just whipped out like along the top of the heading.

1665 Q Had it any effect upon you? A No, it had not.

1666 Mr. Allison: Q It just hit you, did it? A Well, I kept down.

1667 Mr. Lyngby: Q Did you fall on your face? A No, not on my face, but I fell so that I could get out of the wind of it if there was too much of it, as far as I

1668 Q Do you know whether there was reported to any official or not? A I could not say.

1669 Q It was not your working place? A No.

1670 Q Were any other men now who were working that place? A To the best of my knowledge they are in Richmond quarries; they were there. One went there a few days before the explosion. The other was a man who was in the explosion, and he left there so soon as he could get away.

1671 Q Do you see that Christian name? A These you have got me. I could not tell you that.

1672 Q But I have not got you — there is the trouble? A I think fairly was the name of Messieurs. But the other was they used to call "Smiler" for a nickname.

1673 Mr. Bruce: Q What? A He was known by the name of "Smiler Williams."

1674 Mr. Lyngby: Q On any other occasions have you seen him since? A No, not in the whole

action.

1675 Q Is any witness? A I have seen it something similar, only not as much, as No 1 section.

1676 Q Is what you of No 1? A In No 22 heading.

1677 Mr. Bruce Smith: Q Was it No 22 then? A Yes, the question I worked in it. That would be the quarter after what I looked at.

1678 Mr. Lyngby: Q When was that No 22 heading? A In Powell's Flat.

1679 Q (Here is Powell's Flat questioning on the map)? A In one of Powell's Flat.

1680 Q Straight in there? A Yes.

1681 Q Going that way? A Yes.

1682 Q How far up was it? A I could not tell you the numbers of the plans, but to the best of my knowledge there were not an even half in the heading.

1683 Q That would be near the end of the heading off Powell's Flat? A Yes.

1684 Q The heading passed and by the witness in No 22 on the plan before the Commissioners?

1685 Mr. Lyngby: Q How long was that before the disaster? A I could not say. We only worked in it a month, I think; but I think it was a little before the disaster, anyhow.

1686 Q What do you call a hole? A I could not say a mark or a blemish.

1687 Q Was it within a month of the disaster?

1688 Mr. Bruce Smith: The witness's name is down on the plan, and he said it.

1689 Mr. Lyngby: Q Was it some other? A Head.

1690 Mr. Bruce Smith: The witness is down.

1691 Mr. Lyngby: Q I want you to tell us entirely what happened there? A It was something

1692 Q I want to know exactly what happened? A We had fired a shot, and it bang up something like the other one. But two or three inches it was longer to the roof, just keeping, and ready to fall

1693 Q And when I went back up mine now, "You want to be careful going back there, the matter looks up on you." I went back and, of course, with him telling me that, I naturally kept my head down a little, and when I did get the light up to see if we could have to shoot, he again, or to see whether we could

1694 Q And when I did get the light up to see if we could have to shoot, he again, or to see whether we could

1695 Q And when I did get the light up to see if we could have to shoot, he again, or to see whether we could

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1703 Q And when I did get the light up to see if we could have to shoot, he again, or to see whether we could

1704

- 7691 Q Do you know whether he reported it? A Not to my knowledge.
- 7692 Q If not you say reason for not reporting it? A The only reason was, when he seemed to laugh at it I took it to be a nervous movement with the idea of him who had worked there so long.
- 7693 Q What? The discovery of gas was that? A Yes, that was my opinion.
- 7694 Q How upon what do you base your opinion that gas was a serious thing in Kamble? A Oh, well, I suppose, simply common sense.
- 7695 Q Do you know that gas had not been reported there within twelve months of the disaster, according to the officials? A I never made it my business to inquire if they never reported gas, or if they ever reported it.
- 7696 Q Did you consider that gas was dangerous? A I do not know that I ever thought about it.
- 7697 Q But you recognize now that it was dangerous? A There is no doubt now.
- 7698 Q Was that a dusty part of the mine, that last part? A No.
- 7699 Q Was it a damp part? A Yes.
- 7700 Q Was the place where you were working in the Sixth District a dusty part? A No.
- 7701 Q Was that a damp part? A Yes.
- 7702 Q Were the roads ever watered in either of those places? A Well, I believe on one occasion I noticed a drop of water on the roads, on the travelling road, that is—about one occasion only.
- 7703 Q Do you know of any dusty parts of Kamble Mine? A I do not know any dusty working places.
- 7704 Q Well, what place do you know that are dusty? A Well, the travelling roads—one travelling road in particular.
- 7705 Q Which one is that? A It starts from Adam's Flat, the telephone cable in No. 1, and, as far as I have travelled down it, it was dusty dusty down to Paul's Flat, or almost to Paul's Mine, as they call it.
- 7706 Q You say that, in your opinion, that was the dustiest part of the mine? A The dustiest part that I have seen in the mine.
- 7707 Q Was that ever watered—that travelling road? A Not to my knowledge.
- 7708 Q And, as you would go along it, would the dust rise? A If there were a few men together of course there would be a good deal of dust, but if a man were by himself, of course he would always keep ahead of it.
- 7709 Q Did you ever report that the dust was too much, as too strong, large? A No, I have never looked reporting anything.
- 7710 Q Now, tell me what sort of air had you in that last place at the No. 2 shaft? A I had good air in that No. 22 heading.
- 7711 Q At the time that this gas hit, was the heading close up to the face? A Yes.
- 7712 Q And in the other (Black) heading where the gas hit, what sort was the air? A I could not tell you about the air, about the particular place where the gas hit. It was not my own place.
- 7713 Q But is your own place where you were about there? A There was once or twice when I reported to know that I did not think that there was sufficient air going in there, and it was a bit hot.
- 7714 Q Was anything done by Evans when you reported that the air was not sufficient? A He just looked the heading a bit closer to the face, that is all.
- 7715 Q Did you ever report to anybody else that the air was not sufficient? A Yes, I reported to Mr. Nelson, when he was my deputy in No. 1.
- 7716 Q What part of No. 1 was the air deficient in? A No. 68 head, in that quarter. It was a head off Paul's Flat heading.
- 7717 Q And what was done by Mr. Nelson? A He just brought the heading a little closer.
- 7718 Q When you say the air was hot, was it too hot to work in? A No, but it was not pleasant to work in. You know, you could feel the effects of it on you. It seemed to give you a dreary feeling after you had worked in it so. It was all kind of nasty after you had worked in it for a length of time.
- 7719 Q It had then effect on your eyesight? A I cannot say it had an effect on my eyesight.
- 7720 Q In addition to that gas that you had discovered, how you ever discovered gas in Mount Kamble? A Not to my knowledge. I have never seen it.
- 7721 Q Have you ever used a safety-lamp? A No.
- 7722 Q Do you know how to use one? A No.
- 7723 Q What has been your total mining experience? A I have worked on and off in coal-mines since I was a lad.
- 7724 Q About how many years? A About sixteen or seventeen years, I suppose. Of course I have not been underground all the time, you will understand.
- 7725 Q Well, underground, how long have you worked? A I was a kind of passage, I am not certain.
- 7726 Q Well, roughly? A I would say, I suppose I have been ten years underground.
- 7727 Q Do you know how to use a safety lamp in detecting gas? A No, I would not say I do.
- 7728 Q Coming to the mine you are working in at present, what sort is the air at Kears? A It is what I would call good air—what I have seen of it.
- 7729 Q Have you had any bad air there? A Oh yes, not to call bad air. It was slightly warm in one place I have worked in, but nothing out of the common.
- 7730 Q How long ago was that? A Just a few weeks ago.
- 7731 Q Was there any smoke in your place, notwithstanding? A No, I would not to acknowledge. It was simply that a lot of smoke travelling at one time.
- 7732 Q Have you ever found gas in Kears? A No.
- 7733 Q How many roads do you leave out of Kears? A I leave three roads out.
- 7734 Q How many did you leave out of Kamble? A Two.
- 7735 Q What were they? A The daylight tunnel, and the main travelling road.

Cross-examination by Mr. Wade—

- 7736 Q I understood that you only saw this fire, which you think was gas, twice in Mount Kamble? A Yes.
- 7737 Q And I suppose you have fired a good many shots there yourself, have you not? A Yes.
- 7738 Q How long have you working in Mount Kamble? A Somewhere near about one month.

7742. Q That would be six more months past before the disaster? A Yes.
7743. Q And what parts did you work on? You have told us of the last quarter past before the disaster—that quarter was only about three or four weeks? A About a month past.
7744. Q And the quarter before that you were in the leading between Powell's Flat and the No. 3 Highways road? A Not in the leading; I worked as a hand on that leading.
7745. Q What other parts did you work on besides that? A When I started first, I worked on a left hand lead off Powell's flat leading.
7746. Q You worked in and about, or round about, Powell's Flat all the time you were in Kamble? Is that it? A Yes.
7747. Q You spoke about the fore up in Manders and Williams' bord from a standing shot? A Yes.
7748. Q Do you mean by that that the shot had not brought all the coal down? A That was it. It struck hard; yes. A just left a few pieces.
7749. Q And I suppose it left a big crack? A Yes.
7750. Q And did you notice the smoke coming out of that crack? A There was a good deal of smoke coming out of the top, where it had broken away from the roof.
7751. Q That would be above the crack was? A Yes, it was smoked along the top and down the side.
7752. Q And the smoke would rise to the highest point? A Yes.
7753. Q And the smoke was coming out of the crack apparently caused by the shot? A Yes.
7754. Q Now, in the other case, in your own working place, was it the same kind of thing there; that there was a crack, and the smoke was coming out of the crack? A Yes, it was something similar.
7755. Q That is, there was a crack, the smoke was coming out, and your light seemed to set it on fire? A Yes.
7756. Q Now, with regard to the first occasion, I understood that so soon as you saw the flame you dashed at once? A Yes.
7757. Q Did you put your head down and close your eyes? A I swung round out of the road down below.
7758. Q Did you turn your head away from it? A I swung round quickly and got down.
7759. Q Did you turn your head away from or towards the flame? A I turned it away after I saw what it was. Of course I could see it was a flame.
7760. Q I want to know, did you see the length of the flame? Can you be precise about that? You say it was a yard back? Q Yes, I could see that. I saw it once that distance back.
7761. Q What distance? A I estimated about 12 feet, no more so I could judge. I could not say positively 12 feet.
7762. Q What was the length of the smoke caused by the shot in the first case? How long would it be—a few feet? A The smoke down the side of the work as far as I could see, of course, was pretty near to the bottom of the road.
7763. Q From the roof? A Yes, it was a notch along the roof and down the side.
7764. Q Pretty well the full length of the road, is that? A Yes.
7765. Q And how far along the road? I could see it to be 10 feet or 12 feet from the door along the roof? A Oh, you mean there that. It might have been a couple of yards, or perhaps, even more than that.
7766. Q Did you yourself see shots pretty frequently? A Yes.
7767. Q Were you doing shots pretty well every day? A Yes.
7768. Q And I understand, when the shot actually came down after the shot, you never saw anything like that? A No.
7769. Q You have here a kind various questions about the state of the air. I suppose in any mine you have ever been in you have found the air warmer at some times than at others? A Yes, at some different places, at different conditions. That is my idea of it.
7770. Q And if may get warmer, I suppose, if they are firing too many shots about the same time in your sight, and the air comes down, pretty thick? That makes it warm or stuffy? A Of course, that may have an effect on it, I don't know.
7771. Q Does not the smoke coming down make it hotter? Supposing you have seven or eight people, or seven or eight places, where you bring shots off about the same time, and the smoke rising round to your place, does not that make the air warmer? A Yes. I don't say you would not get all the smoke off everybody firing.
7772. Q I did not say you did. But that we shall tend to make the air warmer? A Yes, I should think so.
7773. Q What collieries have you worked in besides Kears and Kamble? A Yes a while in Ball's, North Ball's, Commercial, and Mount Pleasant.
7774. Q When were you at Corwood? A It is a good while ago; just after Corwood opened.
7775. Q Were not you in the pit on the day of the disaster? A No.
7776. Q What was the substance used for firing these shots? Was it powder? I mean in these places where you saw the fire? A Yes.
7777. Q Gladly blowing powder? A Yes.

Examination by Mr. Bruce Smith—

7778. Q I understand you have been in Ball's, North Ball's, Mount Pleasant, Commercial, Kears, and Kamble? A Yes.
7779. Q When you were in Ball's, what was the nature of ventilation? A A furnace, or two furnaces, I believe, but one for certain.
7780. Q And what was your experience of the ventilation in that mine at that time? A I considered Ball's was well ventilated.
7781. Q How long were you there? A I was there a few months, that was all.
7782. Q And you had no chance to compare it with? That is to say, you had no more chance to compare than you had in any other mine? A No, it was very well ventilated; I think so.
7783. Q Now, with regard to North Ball's, what was the method of ventilation there? A I could not tell you.
7784. Q Was that satisfactorily ventilated? A It appeared to be then, although—
7785. Q What were you going to say? A I have lost it now.
7786. Q Now, Mount Pleasant, what was the method of ventilation when you were there? A Furnace

[Scene—2. Mall, 10 January, 1793.]

7787 Q And how long was that ago? A It was years ago. I left Mount Pleasant and went to Old Ball's. It was nine or ten years ago, I think.

7788 Q Can you remember it sufficiently to say whether the visitation was satisfactory? A No; it was not. It was very unsatisfactory while I was there.

7789 Q And that was a failure at the time? A Yes.

7790 Q Now, Correll, what was that when you were gone—a fix or a failure? A There was no fix.

7791 Q It was a failure then? A Yes; and it appeared to be all right.

7792 Q Can you account for Mount Pleasant being so unsatisfactory as compared with the others? A I think it was the bad system of visitation. Of course, a man is not allowed to roam over a mine to find out the extent of it; but there was something radically wrong somewhere.

7793 Q You were not personally because a sufficient amount of air was not introduced into the mine; but because it was badly managed could? A I think that had a lot to do with it.

7794 Q You are on Mount Kew at present? A Yes.

7795 Q That is a fix? A No, a failure.

7796 Q What is your experience of the visitation there? A Mount Kew is pretty well visitated now.

7797 Q It is satisfactory? A Yes.

7798 Q And what was your experience of Kewala with the exception of these hot places that you told us you reported once? A I thought Kewala was well visitated. That is my experience of it, of course.

7799 Q I cannot speaking about other people's experience through you? A No.

7800 Q During the nine months that you were at Kewala, did you ever experience the air becoming suddenly stationary? A No; I do not remember that.

7801 Q Did you ever experience the air being warmed—suddenly going the opposite way? A Not in Kewala.

7802 Q Did you ever hear of its doing so? A I have seen it occur in Mount Kew a good few years ago.

7803 Q To what did you attribute that? A Well, I had no experience.

7804 Q Did you ever find out? A The miners considered it was exactly what it did it then. I do not know.

7805 Q That is what you heard from your fellow miners? A Yes.

7806 Q Did that occur more than once at Kew? A It occurred almost every time a westerly wind blew in Kew at one time.

7807 Q Did it occur usually? A I never heard of it at Kew.

7808 Q And the westerly winds have not stopped blowing, have they? A No.

7809 Q You have told us that you knew two ways out of Mount Kewala, that is to say, that you knew the way you came in, and you knew the daylight tunnel on the east side? A Yes.

7810 Q Have you had that daylight tunnel out? A I found it out from other miners.

7811 Q The miners told you of that way only? A The men came out that way for a short cut home; and it saved me to come out that way for a short cut home too, and I took advantage of it.

7812 Q Were you ever stopped from going out that way? A No.

7813 Q Were you ever told that you were not allowed to go out that way? A Not, not by an official, like.

7814 Q I mean by an official. Did any official know you went out that way? A I did not meet so official on the road, but it was well known that the men did go out that way.

7815 Q And no objection was ever offered to your going out? A No.

7816 Q How came you to go out that way—was it a short cut home for you? A Yes, I went off about 2 miles.

7817 Q And that was your reason—it was not because you wanted to know the means of escape in case of a accident? A No.

7818 Q Do many of the miners go that way? A Only those living on that side who take advantage of it.

7819 Q That head T2 is which you worked, was not that the highest part of the mine, as far as you knew it? A Yes, it was in the false bottom.

7820 Q There is a small side one as you go up to it? A No.

7821 Q There is it not a high part? A It is not of a bit of a waller, but not a really high part.

7822 Q Do you know of a rule by which you were required to report anything you saw dangerous to the men? A I have heard tell of it, but I have never read it.

7823 Q You have a copy, I suppose, of that little book (book of rules)? A I have been too busy to get it.

7824 Q You have taken down out of the twenty-four? A That is to say not at all.

7825 Q You do not sleep sixteen hours? A Well, I have never studied that.

7826 Q You know this rule: "42. All employees must report to the Manager, or official in charge any defect they may discover in the machinery or appliances, or any appearance of fire-damp, smoke-damp, or other noxious gas, or any defect in the roof or sides of the mine, or any other indication of danger from any other cause." A Yes. I have heard tell of the rule.

7827 Q You know very well that when gas appears frequently in the mine it becomes an element of danger to yourself and all your fellow miners? A I know it now.

7828 Q Did not you know it before? A I suppose a man gets accustomed to these things.

7829 Q Your mate, you say, used to treat it as a job? A He used to kind of tolerate me when I spoke about it.

7830 Q He chided you? A Yes.

7831 Q And you thought it a proper thing I suppose to succumb to the chaff, and to also treat it lightly? A That is it.

7832 Q What would you do now if you discovered gas? A I would report it.

7833 Q Fearlessly? A There is no doubt about that. I would not be the slightest bit frightened to report it.

- 2626 Q. Whom would you expect it to be? A. I would expect it to be the deputy.
- 2627 Q. Do you think that would be done by most men, even if they discolored gas? A. No, I do not think so.
- 2628 Q. You do not think that the majority of them would do that? A. No.
- 2629 Q. I think I know why, but I would like you to say why—for what reason? A. Oh, well, I suppose they are a bit frightened of the management, that is all.
- 2630 Q. And as far as your experience goes, has that been the old objection? A. Yes, I have never had any objection myself.
- 2631 Q. Then, I understand, you have changed your attitude in that respect? A. No doubt.
- 2632 Q. Late events have given you more courage than you had before? A. It was not for the want of courage.
- 2633 Q. Would you have been done if before if you had realized the danger? A. There is no doubt about it.
- 2634 Q. And observed the result, —you are a bad of passage, you said? A. Yes.
- 2635 Q. Mr. Wade? He had no fear of the result.
- 2636 Q. Where? I would like my chance.
- 2637 Q. Mr. Bruce Smith? Q. Would you be afraid of the black-and-white? A. I am not afraid of it, it is a matter of course — a man might be throwing out of work, but that would not make me a bit frightened.
- 2638 Q. You are not married? A. No.
- 2639 Q. You have not so much society as a man who has a lot of friends? A. That has no effect, as I am.
- 2640 Q. Where you are that flame which Mr. Wade examined you about, I think you said you did not put your head down so that you could not see it, and you did see it,—can you tell me what colour that flame was? A. I did not come to see the colour.
- 2641 Q. I did not see what Liberty shade. Was it red or blue? A. No and or blue, in my opinion it was just like a white light.
- 2642 Q. Was it like an ordinary red flame? A. No, there was no red flame about it. It was more like the light of a kerosene lantern—just a light like. I did not have time to look at the edges of it to see if it was blue.
- 2643 Q. Do you remember the flame on the other flame that you saw when going into the flame, when it came out 12 feet—oh, that is the correct? A. Yes.
- 2644 Q. But there is another occasion when the staff lighted and went in again? A. I did not stop to see the colour of the flame.
- 2645 Q. You told us of two occasions—one in which it came out about 22 or 12 feet? A. Yes.
- 2646 Q. And another in which it came out about a yard or 4 feet? A. Yes.
- 2647 Q. Where they about the same colour? A. Yes, as near as I could judge.
- 2648 Q. Which was it you saw first—the 12 or 4 feet one? A. No, the one in the shaft section.
- 2649 Q. That is the one that caused you to be blown? A. Yes.
- 2650 Q. The other one—did you see that? A. Yes, I just saw it the same as I saw the other, just a flash, and it was gone.
- 2651 Q. You cannot tell me the colour? Was it nearer to red, or blue, or white? A. It appeared to be white.
- 2652 Q. Is it the sort of flame you get from a coal fire? A. How do you mean? An ordinary—
- 2653 Q. Coal fire.
- 2654 Q. Mr. Moore? The witness honestly says he had not time to see it.
- 2655 Q. Mr. Bruce Smith? And I honestly ask him something further.
- 2656 Q. Mr. Moore? It was very much a case of stand from under.

Examination by Mr. Stabile —

- 2657 Q. Where you saw that 12 feet of flame, was that in No. 12? A. No, that was in the heading in the shaft section.
- 2658 Q. That was the heading that Mander and Williams were working in? A. Yes.
- 2659 Q. Did you get up to the face where you saw the flame? A. No, I did not bother going back again.
- 2660 Q. Did you hear in the face previous to the flame? A. I had often been in the face of the machine, and different things like that.
- 2661 Q. How far was the face from the face there? A. I could not tell you that. I never took this much notice.
- 2662 Q. Would it be within 12 feet of the face? A. I could not like to say myself, as far as the first time is concerned, because I was in such a hurry to get out of there.
- 2663 Q. How far was you at the face when you saw the 12 feet of flame? A. I got pretty close to the face, and when I put my light up she came over me. I got in a shocking position, down low.
- 2664 Q. How do you manage to know the exact distance like that was? A. I suppose I guessed it, like anybody else.
- 2665 Q. Do you remember if the flame came on the right side of the heading, or was it all on the inside? A. On the inside. The heading was not done in then.
- 2666 Q. When the heading was not done in? A. Not at that particular time.
- 2667 Q. Was there much smoke at that time? A. A good deal of smoke.
- 2668 Q. When the smoke conditions right along the face? A. It was coming round the heading. There was a certain amount of smoke behind the heading when we went in. It was driven in by the shot.
- 2669 Q. When was it hit? A. My lamp.
- 2670 Q. When was the first shot sent in after the shot had been fired? A. I was the first that went in to have a look at it. It was a bit explosive.
- 2671 Q. You were not so surprised afterwards? A. No.
- 2672 Q. Was the smoke thicker than you have seen on other occasions after firing shots? A. I would not think so.
- 2673 Q. Have you ever seen the smoke fly after firing shots at all? A. Well, I would not like to say, Mr. Stabile, I suppose it would be much. I have seen a red flame have a hole after a shot had been fired, but of course it is more like coal-dust—no little bit burning.
- 2674 Q. What made you think it was gas? A. The behaviour of it, I suppose.

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Witness—J. McLean, 27 January 1933

- 2947 Q It is upon a horse? A It did, very quickly.
- 2948 Q And did not you notice the colour of the light at all when it lit? A It was a light colour, that is all I noticed—a rather bright light.
- 2949 Q Did it flash all across the front of the house gradually outside? A It flashed from the door up to the direction out and towards the roof, and then way and up to the end of the roof.
- 2950 Q When you examined the top of the roof, or down in the bottom part of it? A I looked for it.
- 2951 Q Where you examined the top of the roof, or down in the bottom? I just put my light down like that, and I kept down for fear anything might be there. I had been warned by different men that it was possible to find things like that.
- 2952 Q I would like to know what? A They considered it was powder smoke.
- 2953 Q What did you consider it was? A I considered it was gas.
- 2954 Q If he warned you previous to that about the possibility of some smoke coming after that? A It was a while I worked with in Kneble—a Yankee fellow—that told me to be careful when we went back to what like that.
- 2955 Q I suppose you have fired many a shot, have you not? A Yes.
- 2956 Q And apart from these two occasions that you have mentioned here—Mansfield and Williams' landing, and No. 72, which you were on before you came—have you ever lit light any other times? A No, those the only times you have been in light? A Yes.
- 2957 Q Have you seen the smoke equally as thick in other places? A Yes; and I know it is.
- 2958 Q Quite as thick? A Yes.
- 2959 Q And you have taken your lamp and remained in the same way? Yes.
- 2960 Q And had no light? A Yes.
- 2961 Q How far was the distance from the back of No. 72—you had a light there, which, in your opinion was gas? A Yes, what I thought was gas.
- 2962 Q That was after a short had been lit? A Yes.
- 2963 Q How far was the light on off the face on that occasion? A I would say it was about, as much as I could judge, 4 yards.
- 2964 Q And how far did the flame come back on that occasion in No. 72? A To my opinion it was about 4 or 5 feet, it just made a quick flash out and back again.
- 2965 Q Was the shot also lit? A Yes.
- 2966 Q Were the conditions very smoky then? A Yes; there was a good deal of smoke then.
- 2967 Q Did the smoke hang about the place long after you had fired the shot? A No, it got away pretty soon.
- 2968 Q How long? A It was a thing I never took particular notice of, you know, but I wouldn't about ten seconds, I suppose, and the smoke, as you know, is pretty clear.
- 2969 Q It would take about ten seconds to clear? A Yes; that is to be pretty well clear.
- 2970 Q Did you say reason to complain about the ventilation in that landing at all? A No, not by that heading.
- 2971 Q Are there the only two places you worked in at Kneble—that number off that landing and No. 72? A I worked on them first, and No. 43 is next.
- 2972 Q All in the same heading? A Yes, just in the middle of the quarter I started, and I was closer from me to the other, and then I got a coal from one to another, and then I was in the gaspocket after that.
- 2973 Q And the shade of your experience in Kneble from a coal-getter's point of view, was in the gaspocket or not? A Yes.
- 2974 Q This is between No. 43 head, which you worked in, and No. 72? A Yes.
- 2975 Q You have not any knowledge of the state of the ventilation in other parts of the colliery, have you? A No.
- 2976 Q You told us that you thought the ventilation at Bull Colliery was very good during your time there—was not part of the Bull Colliery where you were working in then? A Not that.
- 2977 Q Is a heading or level? A A level.
- 2978 Q Is the heading kept well up there? A Yes, fairly close. Well, within reasonable distance.
- 2979 Q Were you in one place the whole of the time? A I worked in two different places.
- 2980 Q One close to the other? A I suppose it would be two or three headings away from the other, but both in the right-hand section.
- 2981 Q Both ventilated by the one current? A I could not say.
- 2982 Q I suppose, generally, you do not know anything at all about the ventilation of Bull Colliery? A No.
- 2983 Q You told us about the ventilation being somewhat bad at Mount Kennedy—did you see any bad-draw there? A Yes.
- 2984 Q Did you ever complain of that? A Well, there were four or five bad-draw men there at one time worked off about Black Draw, as there is one, to have been complaint.
- 2985 Q How long was that only? A I could not tell you the exact date.
- 2986 Q Was it six months? A It is more than that number of years ago.
- 2987 Q How long have you been working at Mount Kennedy then last time? A Since the beginning of September last.
- 2988 Q In what part of Mount Kennedy? A I have worked in what they call the Old Straight.
- 2989 Q Are you working on a heading? A Yes, at present.
- 2990 Q And did I understand you to say that the ventilation was satisfactory there? A Yes.
- 2991 Q Is the heading well kept up? A Yes, pretty well.
- 2992 Q Does the running deputy call every day? A Yes, he examines every day.
- 2993 Q You are working day shift? A No, night shift, I work day shift too. Day and night.
- 2994 Q You have an examining deputy straight, and now when you would change the day? A Yes.
- 2995 Q Does he make an examination at once then? A Yes.
- 2996 Q Is it done in one? A I could not describe the lamp.
- 2997 Q A safety lamp? A Yes, and he looks it over pretty far, and, I estimate, perhaps, twice in the roof, or on the face of the roof, or anywhere where there might be a possible chance of anything dangerous.

- 2639 Q He does that every day? A Yes.
 2640 Q Do you know anything about the conditions of mine workings at North Cliff? A No.
 2641 Q So, as far as your knowledge goes it is confined to this particular place you are working at?
 A Yes, that is so.

[Witness retired.]

Mr SIDNEY MIDDLEBURY was sworn and examined as follows:—

Examination conducted by Mr. Knight:—

- 2642 Q What is your name? A Sidney Leslie Middlebury.
 2643 Q Where are you? A A miner, at present my occupation is clerk-weighman.
 2644 Q Where? A South Cliff.
 2645 Q Are you a member of the Delegates Board of the Hammers Mine? A Yes.
 2646 Q Have you ever worked at North Cliff? A No.
 2647 Q What has been your mining experience? A About ten years' Colonial experience, and five in the old country.
 2648 Q What mines in the old country? A In Turkey.
 2649 Q How long have you been working at North Cliff? A About a year and nine months.
 2650 Q What style of workings have you there, a furnace or a fan? A A fan.
 2651 Q Have you worked in any mines in this district where the furnace was used? A Not in this Colony.
 2652 Q You know these recommendations from the Delegates Board? A Yes.
 2653 Q Take the first one, that Managers, under-managers, deputies and shot-fires should hold certificates of competency by examination. How are you going to go in support of that recommendation? A I have got nothing from my feelings that I was a member of the South Cliff Lodge of Masons to strongly support those recommendations. They think it is to well known that those recommendations should be put in force for the protection of their lives. Men take the position of deputies and, in our system, their position is too high for their qualifications.
 2654 Q Has that been your own experience? A Yes; it has been my own experience.
 2655 Q What is your idea first at North Cliff? A Well, at present the shot-fires are different from what they were when I was on the coal there.
 2656 Q When you were on the coal, who was the shot-fire? A Alward.
 2657 Q Do you know whether he had any experience as a shot-fire? A He is a man that I was not acquainted with before I went to work there.
 2658 Q And how long has it been the practice at North Cliff for a special shot-fire to be employed? A On the first occasion, first the miners thought more seriously they were appointed, and then the shot-fires were taken out, and put in again on the 16th of September, and on both occasions they appointed special shot-fires.
 2659 Q Do you know why the lamps were put into South Cliff? A Owing to the gas there.
 2660 Q Did you ever discover gas there? A Yes, I have seen gas there.
 2661 Q How long before the lamps were put in? A They were put in shortly after we saw gas there—in certain portions of it the first time, but about the other portions I do not know. The lamps were introduced into the portion I saw it.
 2662 Q Did you see much gas there? A I had seen it flow up after firing a shot.
 2663 Q Is the whole mine worked with safety-lamps now? A Not quite. The whole of the mine that are on contract work, and the machines are using safety-lamps, but there are a lot of shift-men on the roads that are using naked lights. We requested the Manager to put safety lights in the mine of the pit, and he told me he was responsible for that matter.
 2664 Q Who is your Manager there? A Mr. Wilson.
 2665 Q Do you know whether he holds a certificate by examination? A No, it is a service certificate, so I believe.
 2666 Q Did you give him any reason why you wanted safety-lamps in the whole of the pit? A We gave him the reason that we did not consider ourselves safe if our neighbours was using the naked light when we were on up the safety-light.
 2667 Q Was that a deposit on that went to him? A Yes.
 2668 Q Is your opinion is it now safe to work any part of that pit with a naked light? A In my opinion it is not.
 2669 Q And do you voice the opinion of all men when you say that? A Well, the meeting carried the motion unanimously that a deposition should not open him to have those naked lights taken off the road.
 2670 Q When he refused to put the safety-lamps in all parts of the mine did you do anything, or did the Lodge do anything? A No; he went on in under-stand that the responsibility lay all on his shoulders, and we told him that when the mine had blown up it would be too late to limit the responsibility on his shoulders.
 2671 Q What did I say to that? A It is well that it is because.
 2672 Q Did he make any suggestion about dismissal or anything like that? A No, he did not, not that I was aware of. The deposition report was not to that effect.
 2673 Q Did you, as a Lodge, make any representations to the Inspector or the Chief Inspector concerning what you regarded as the use of safety of the mine? A No, we do not carry it any further than that.
 2674 Q Have any men ever employed there? A Five or six I suppose, about 190 to 1910.
 2675 Q Do you know whether gas has often been found there? A Well, it is there occasionally now. It is not there now very often.
 2676 Q Do you know whether it is reported? A I cannot say whether it is reported or not. The Government Inspector is in there very often now.
 2677 Q Is the deputy that you have there certified by any examination? A The underground manager I believe has got a certificate or some of that, I am not sure what.

Witness—St. Anthony, 21 January, 1907.

- 2973 Q By examination or service? A I think it is by examination.
- 2974 Q What about the deputy? A I could not say.
- 2975 Q And you do not know about the shot fired? A He has none at all.
- 2976 Q Is no provision made for entering the place where the shot is fired? A Since the Kennedy disaster there has been.
- 2977 Q Before that time no provision made? A No.
- 2978 Q Is there a duty mine? A Yes.
- 2979 Q You have had experience of duty and non-duty mines? A Yes.
- 2980 Q You say that this is a very dusty mine? A Well, no portion of it—that is to say, it is not one of the most I have worked in, by a long way.
- 2981 Q Is this working now carried on automatically? A I believe so. They have arrangements there, and the mine is constantly running down for the purpose.
- 2982 Q Recommendation No. 2? That inspectors should be vested with absolute powers to order the use of safety lamps? Is any of what you have told us, do you think an Inspector should have absolute power to order in the safety-lamps? A Yes, I consider they should have more power than they have.
- 2983 Q Would the men at South Clifton be more satisfied, if the Inspector had that power, to leave it to him? A They unanimously agreed to that motion from the Safety Board. They unanimously agreed to the recommendation from the Safety Board.
- 2984 Q And it is not felt that they would lose in their wages from the introduction of the safety-lamp? A It would make a difference.
- 2985 Q You know there is a that difference? A Yes.
- 2986 Q You know that as about wages? A Yes.
- 2987 Q What would the men suffer in a general way if the lamps were introduced all over the mine? A Well, we have suffered a 25 per cent. reduction, I consider.
- 2988 Q And notwithstanding that the men unanimously voted this recommendation? A In the last instance, when the men got introduced there the first time on the 26th of September, he was only going to introduce them to one side of the pit, and we went on him then, and told him we would then to be introduced there, about the pit. We did that then, for the rope made, where they used the naked lights. All the men and where there were sections—all, for the children on the roadway.
- 2989 Q Recommendation No. 3? Substitution of fuel for lamps? What do you say to that? A I consider it is right. A fee is more to be depended upon than a farmer.
- 2990 Q Have you had experience of bad ventilation through furnaces? A I have worked in a colliery in Victoria where we have had to cause work through it.
- 2991 Q From the defective working of the furnace? A I do not say it was from the defective working of the furnace, but we had to stop work, and we went down into the Department, and they sent an Inspector up, and he said it was defective, so we shut our furnaces and reported.
- 2992 Q What was the name of that colliery? A Outram.
- 2993 Q Was a fee put in afterwards? A No. I do not think it is put in yet.
- 2994 Q Have you ever known the air to be reversed in a mine with a furnace? A I cannot say that I have. I have felt a shock in the air.
- 2995 Q Have you felt the air stationary? A Some days you get air very cold, and other days out as good. In my opinion, the condition of the atmosphere and the direction of the wind have a lot to do with it.
- 2996 Q Recommendation No. 4, the cutting off of waste workings, and extinguishing them by return airways—what do you say as that matter? A I have seen a little of it (cutting off), but not a great amount of it. But if there is anything to be done in it (the mine), I think it ought to be allowed to come out.
- 2997 Q Recommendation No. 5, cuttings every 30 yards—what do you say to that? A Where cuttings are further apart than that, there is a great chance of the men being knocked down and the air stopped.
- 2998 Q What is the average length of the cut throughs at South Clifton? A They are about 30 yards, I suppose, or 40.
- 2999 Q And is the breathing kept well up at South Clifton? A Pretty well.
- 3000 Q What about distance from the face? A Sometimes it is put up too far for me working without a shot the wind air comes right up on you at the face.
- 3001 Q How? How? Q Do you mean you can't hold—it is too cold? A Yes, it comes on your back too cold.
- 3002 Q Mr. [unclear] Q In your opinion would the roof be weakened by having the cut-throughs only 30 yards distant from one another? A It would, I suppose, under a slight difference in that.
- 3003 Q To a dangerous extent? A I think it ought to be prevented, though, by water.
- 3004 Q Recommendation No. 6, the South Clifton men requested extra money with a locked safety-lamp? A Pledged.
- 3005 Q Recommendation No. 7, weekly examination with hydrogen flame. What do you say as that? A It has a tendency to keep the mine more quiet, more safe, by having constant examinations of that description.
- 3006 Q In your opinion would the men have a greater sense of security? A Yes.
- 3007 Q Recommendation No. 12, extra supply of safety-lamps to be kept at the mine. Did you go to Kennedy when the disaster? A I was there on the Friday morning.
- 3008 Q Do you know whether any lamps were sent from South Clifton to Kennedy? A We took some down with us.
- 3009 Q Had you any orders for taking these with you? A We took them with us with the intention of giving us if we had the opportunity of working.
- 3010 Q Did you know you did not get lamps at Kennedy? A Yes.
- 3011 Q How did you know that? A Well, once, I think.
- 3012 Q Did you take more than you wanted for your own use? A Yes. I think so.
- 3013 Q Had you any reserve of lamps at South Clifton, or kept you now? A No, not now. I think there may be. I could not say for certain, because I know the Manager has ordered a lot from the old Company.

8004 Q. Remembered? No 18, warning the travelling and heading roads? What do you say on that matter? A. In some cases the travelling roads are largely dusty, and, in consequence, travelling amongst the horses and ponies, you cannot see, and it takes a very bad heading, and more dangerous travelling than it would be, were there were some in lamp if you.

8005 Q. Do they warn the travelling roads at South Clifton at all? A. I believe there has been a little put on lately.

8010 Q. Is there much dust on the travelling roads at South Clifton? A. Yes, there was, but I believe they have been cleaned up lately.

8017 Q. Remembered? No 16. You might tell me how often you have seen Mr. Wilson under ground? A. I have been perhaps, say, once a month, when I was underground, but I am not going down very often now, pretty early every day.

8018 Q. Is that the South Clifton? A. Well, it is since then that I have held the position on top, so that I can see how you do it.

8019 Q. Remembered? No 10. Have you mistaken at South Clifton that you see? A. There are mistakes on the main road.

8020 Q. But that is not your travelling road? A. That is not our travelling road. There are bits of cut through from the travelling road.

8021 Q. Do you think the mistakes are large enough on case of accidents? A. I consider the mistakes on the main road, on the main bank at South Clifton are rather serious, the mistake itself would be a bit high and a bit square, and the height of the road is only 4 feet.

8022 Q. Is your eye not, is it wide enough? A. In my opinion, a couple of feet wider would make it more convenient.

8023 Q. Remembered? No 18, instruction to men as to the case, how many roads do you know out of South Clifton? A. Well, there is only one travelling road. There are two from the pit bottom to daylight, we have just drilled one lately and opened another one.

8024 Q. How do you get out of the South Clifton Mine? Do you walk out of the tunnel or come up a shaft? A. Out of the tunnel.

8025 Q. Is that the only way you have got? A. That is the only way.

8026 Q. In case of a disaster, and the pit getting blocked up, how can the men get out? A. I believe there is a way up by the return air course.

8027 Q. Do you know that way? A. No. I do not think out of 200 men there are twelve who know that.

8028 Q. Remembered? No 16. Then you had my exposure of a black lot? A. I have heard talk of it, but I have not seen it as yet.

8029 Q. Do you know of any particular cases where men have been prevented from getting employment for having reported the mine? A. No. I have a case at Victoria where a man got expelled from one colliery, and he could not get a start in the district.

8030 Q. Have you had any experience in New South Wales, in the Riverina district, of cases where men have been refused in that way? A. Not in my time, but I have heard talk of it.

8031 Q. In your opinion, would a provision like that tend to make the men report more than they do on bad management? A. That kind of provision is better than those existing things.

8032 Q. The absence of a provision like that (Remembered? No 16)? A. Yes.

8033 Q. Remembered? No 20. How do they light the face at South Clifton? A. With short long lamps.

8034 Q. Have the men the lamp? Or they wear it? A. No, by wire.

8035 Q. In your opinion is it a dangerous provision to open a safety lamp to light a face? A. If it is dangerous to use a naked light, it is dangerous to open the safety lamp, in my opinion.

8036 Q. You think that is a dangerous provision? A. Yes.

Cross-examined by Mr. Wade—

8037 Q. Supposing the safety lamp is used as a precaution, and there is not necessarily gas in the place, do you see it is dangerous then to open the safety lamp? A. If the lamp is used as a precaution.

8038 Q. Yes? A. I think if they are not small, they should be used right throughout properly.

8039 Q. Supposing you found there is no gas in the place, in that way danger in opening a safety lamp then to fire a shot? A. It may be a blow of gas.

8040 Q. Suppose you know there is not a blow. There are ways of finding out, are there not? A. Yes.

8041 Q. The Mine? Is it well a state of time to ask the witness that question, which comes to this, "If there is no danger, is there danger?" He says that if there is a necessity for enforcing a provision to meet the probability of danger, however remote, it is as well to enforce it. That is a self-evident proposition.

8042 Q. Mr. Bruce Smith? The witness really says there may be no gas at the mine, but there may be a blow.

8043 Q. Mr. Bruce? Yes. What is the answer that suggests itself?

8044 Q. Mr. Wade? A. Now, what part of South Clifton did they put those safety lamps into first of all? A. On the right side.

8045 Q. What are these places, through there? Disturbed country? A. A return airway.

8046 Q. Are they passed through some disturbed country? A. No.

8047 Q. Was not there a big leak there? A. They had just gone through the fault a long way, but it was the return. The air was passing that way back.

8048 Q. Were not the lamps used in going through the fault at all? A. Not while we were on the fault.

8049 Q. They is only a small part of the mine at all events? A. Yes.

8050 Q. And then they were taken away from there? A. Yes.

8051 Q. And since then they have been put in another part of the mine? A. They have been put in through the mine in the working places.

8052 Q. And when do you with the main ways,—do you move the return airway? A. It is the return airway.

8053 Q. Then you are down on the main return airway the men work with naked lights? A. Yes.

8054 Q. What is the danger of that? A. It is not the danger of the men working on the return, but it is the danger of the men leaving the road with the light on their head, and going into the return airway.

8055

Witness—Mr. Edgerton, 12 January, 1909

8105 Q That is, if they break the rules and do not do their duty, there may be danger? A Yes, it may not be taken short and go as those with the school light.

8106 Q Then if the men neglect their duty and disobey the rules, then, even with the school light shown on the men inside, there may be danger? A Yes.

8107 Q I am quite prepared to admit that. Now, why was it that you did not complain to the Government Inspector if you thought this was a serious matter? A If we complain to the Government Inspector we are in the black books at the signing in, with the mine as it is.

8108 Q Now do you say that the Manager's Lodge, as a body, are afraid to report this to the Government Inspector? A I do not say the Manager's Lodge, as a body, are, but the men in the lodge are.

8109 Q You say, in other words, you do not like to do it, but, as a lodge, as a body, you have no fear to bring it under the notice of the Government Inspector? A Yes, but it has to be done indirectly in the first place. It is a complaint to the Lodge, then gets to the Manager's eye.

8110 Q Now, you were as a body to the Manager? A Yes.

8111 Q And you say he would not grant your request? A Yes.

8112 Q Now, just as a common matter, why did you not go to the Government Inspector in the same way? A For the reason that the Government Inspector has not got the power to make him to do it.

8113 Q Why did you not make some complaint to him about it? A We did not think it worth while, when he had no power to alter the conditions.

8114 Q Now, you say you have known the ore to be, not covered, but stationary, in South Cliff? A Not in South Cliff.

8115 Q In what place? A In Victoria, by the Furnace.

8116 Q You were afraid, with regard to South Cliff, if you had known the something to be covered, as a young miner was? No, it has been still? A Not in South Cliff.

8117 Q You have not even known it to be still? A Not in South Cliff.

8118 Q You are not prepared to say I suppose, when you are on the east, that the Manager was not doing the duty very frequently during the week? A I could not say exactly what I have seen.

8119 Q A I was on duty a few other you saw him in your working place? A Yes.

8120 Q Now, when you happen to be in the pit-head, you may see it he goes down? A Not every day.

8121 Q You do not suggest that he has gone down more frequently since the disaster at Kembla? A Presumably have been taken since the disaster.

8122 Q You are not in a position to say he goes down more frequently than he used to? A No, I cannot say.

8123 Q Now, you explain that the manholes are only 4 feet high? A I said 5 feet high.

8124 Q The manholes are 5 feet there? A Yes.

8125 Q That is all right then? A But they are not wide enough, in our opinion, to accommodate more than one or two, or five at those, men.

(At this stage Mr. W. H. Peck attended to take the verbal Notes of the Evidence and Proceedings)

Cases examined by Mr. Thomas Smith:—

8126 Q I understand you to say that, since the Mount Kembla affair, more caution has been observed? A Undoubtedly also with they opened the mine shafts and introduced lamps.

8127 Q I understand that watering had not been done before? A I never saw it done before.

8128 Q How do they do it now? A By watering tubs.

8129 Q How is the water spread? A By a pipe across the end of the tub, with a spray.

8130 Q Like the street watering cart? A The same kind.

8131 Q How high up the ribs does the spray throw the water? A A foot or 12 inches.

8132 Q It mists all the floor and sprays the ribs? A Yes.

8133 Q Do I understand you to say that the mine is dusty? A In parts.

8134 Q Are there any pits down now? A Where the shafts are fired they water it.

8135 Q The lamps were put on after the Kembla explosion? A Yes.

8136 Q You said something about lamps being put in, taken out again and put in again? A That was about fifteen or eighteen months ago.

8137 Q What was that for?—why take them out after they had been once put in? A The lamps were more corrected.

8138 Q They were made more perfect, and the lamps withdrawn? A Yes.

8139 Q When it seemed to be time then to put them in again? A The men got more gassy, and they were getting again.

8140 Q How do you know the mine was more gassy? A By the Deposition.

8141 Q Do you know whether they reported gas? A I do not know. We are not allowed the permission of knowing what they report.

8142 Q How do you know that it became more gassy? How do you know that that was the impression on the mind? A I do not know.

8143 Q It is all serious on your part? A It is serious on my part.

8144 Q You told us that you were with gas in a good many places in that mine,—now, you tell us how many places there are in which you have not risk it? A When using the lamps we do not take any notice of it. We may put a lamp up.

8145 Q You find out that it is there, and take steps to brush it out? A We often take our own and do not out.

8146 Q You were not anxious about it now? A No, with the safety lamps we feel more protected.

8147 Q How many lanterns were there you worked in as New South Wales? A None.

8148 Q How many in Victoria? A None.

8149 Q You said that when you were working with a lantern the men were but and you had to stop, and afterwards were made? A They had to make a lot of about one before we were allowed to work again.

8150 Q After they had made a lot of interest about them was all right? A It was not so bad; but it used to get hot now.

8151 Q Is it hot now? A Not so bad as with a lantern.

8002. You have not had a chance of comparing the same road with a former rail without one, but you are bearing a man with a furnace in your mind—do you feel it has at South Clifton? A. The only time is when we have a lot of business behind us and are doing out through.

8004. Q. You have never had the opportunity of being in a mine with former ventilation, and in the same case with a fan? A. No, I never had that opportunity.

8005. Q. The I understand you in one place is your opinion, it would require a road to have not through frequently? A. It certainly would, but I think the road could be protected at the same time.

8006. Q. Were you had means to form an opinion as to how it would behave the road—what is the extent of your knowledge? A. I have seen the Metropolitan, where there are from 20 to 30 yards.

8007. Q. Do you know the necessity for support is regulated by the weight above the roof of the mine? You do not require the same support in relation to an other ground. Do you know what height of ground there is over the different parts of the mine you are now? A. No.

8008. Q. Therefore you cannot form an opinion? A. No.

Examined by Mr. Robertson—

8009. Q. I think you said there were some disputes and differences at South Clifton that you had not confidence in? A. I did not say that I had not confidence in them, but I did not know who they were.

8010. Q. I think your words were that those persons were too high for their capabilities? A. My opinion is that their opinion is higher than they are capable of doing in many cases.

8011. Q. How do you know that, did you examine them? A. We form an opinion when we see a man come in and form what we think.

8012. Q. Now why do you come to that conclusion? A. They come and do it in a sudden way.

8013. Q. How? A. They put the lamp up and down in a moment—I do not consider that is a sufficient test for gas.

8014. Q. It does not take very long for any person accustomed to detect gas by default its presence? A. It is a matter not but that you have before, it would not, how long in my opinion.

8015. Q. Do you know whether any of them have not told that persons before? A. I could not say. We have our own opinion.

8016. Q. Do you know whether the Manager studied himself that the men was capable? A. I cannot say.

8017. Q. Do you not think it probable that he would—do you not think that no Manager would be in consequence that? A. One would naturally think so.

8018. Q. Now as to warning the men—what do you think is the object in warning the men? A. To keep them the best principally.

8019. Q. I think you said it was uncomfortable to walk along them? A. It is uncomfortable.

8020. Q. It is a matter of comfort, is it? A. Safety and comfort.

8021. Q. In what way would danger arise from the dust? A. By means of accumulation—from what we call a dusty mine.

8022. Q. A dusty road is not a kind of danger? A. No, in itself it is not, but it is uncomfortable.

8023. Q. You do not know of any danger? A. There is danger with men handling the road having a pick it and a lamp is a danger, because dust may arise and blow in their faces, and perhaps they may fall, and fall on the end of a pick.

8024. Q. Through there not being time to see proceeds of an walking along, they might fall on their pick? A. They might also fall on some timber or something lying on the side of the road.

8025. Q. You do not know of any other danger? A. There is only danger by explosion in the pit, which means to be dangerous.

8026. Q. You do not know of any other danger—what is an explosion means a dusty road? A. Of the road is dusty near the fire—after an explosion in the face—

8027. Q. But if the face is not dusty? A. If the face is not dusty, it may not carry it, but it is hard to say how far an explosion will go.

8028. Q. Then if the face is not dusty, there is no danger in a dusty road? A. It depends how far the explosion extends. It depends until it comes to the last there may be danger.

8029. Q. If the fire is sufficiently strong, no other precautions are taken, do you think a dusty road would be dangerous? A. Well, it would not be so dangerous as the other parts of the pit were not attended to.

8030. Q. Do you not think it of much importance to water on the vicinity of the face where the shot firing is exposed as the roadway? A. I do not think it necessary to water the roadway every day.

8031. Q. It would be watered sufficiently, if it is to have any effect it would be thoroughly done? A. It is thoroughly done at the face, I believe.

8032. Q. It is not of more importance to water on the vicinity of the face where the shot firing is exposed as the roadway? A. That is the principal place to be watered.

8033. Q. It is the principal place to be watered, you like a fan better than a furnace? A. Yes.

8034. Q. I think the advantages is made that now when is not so good with a furnace as with a fan? A. No—it is my opinion a furnace is not so good as a fan, the air is not so good with a furnace as with a fan.

8035. Q. Why is it not so good as a fan, you ever used one? A. The atmosphere has a great deal to do with a furnace, but it would not interfere with a fan so much.

8036. Q. Is that not all a question of power? A. I think a fan, being more air than a furnace, sometimes with a furnace it is all air and sometimes more.

8037. Q. Does not the amount of air depend on a furnace better? A. I think a fan can be kept going at the same rate better than a furnace can.

8038. Q. Who should it? A. It appears to be so, in my opinion.

8039. Q. It appears to be so in a good many cases because the men depend on the capacity of the furnace, but the same thing may apply to the fan, you know? A. Yes.

8040. Q. About a hydrogen is it, have you ever used one? A. No.

8041. Q. Have you any knowledge as to the time taken up in making tests? A. It would take a man, as up to a minute, a half an hour or more time.

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8141. Q. If you could take two or three tests in five or ten minutes you would be very clever. It takes three or four times as long as with the ordinary lamp? A. I never saw one used, but I believe they can detect how fast you think.

8142 Q You never saw one used, but you think that they can take two or three tests a minute with them? A That is what I thought.

81.45. Q. Do you know whether hydroponics can run in the Colony? A. No, I do not.

81.44 Q You have no idea about the rest? A No.

11.15 Q. Do you consider the lighting of shops by electricity to be safe? A. My opinion is that it is more safe by more than by a lamp.

8145 Q In these two different situations, lighting a shot by wire and lighting by a strike light? A A vast difference, as you could. It is a flame in one case, and only a spark in the other.

6147 Q But is the lighting of a face by wire, does it not suggest life? Is to your mind this lighting by a wire in to a certain extent dangerous? A It is dangerous to a certain extent.

11:48 Q If you can light gascooler by a wire, do you not think it is possible to light gas by a wire?

8149 Q Then, also all, it is only a question of degree or fancy? A, I consider you can light gun by a

5180 Q. Do you not think the responsive safety of lighting by wire as by a naked light is only fancy?

A: I think it may taste like mine.
BETTY: O. The man just think it looks better? **A:** It looks better.

6132 Q I think you said that you were not allowed the privilege of seeing the reports in the back of the

8169 Q I think you should know better than that. Being a member of the Delegate Board, do you not know you cannot do the books? A The clerk cannot do that, no.

Side Q You said something about the cut-throughs in the Marcellus. C. Kelly being 10 yards apart?

Q133. Q. You have worked in other places than the headlamps? A. I have worked in the pillars.

SLUG Q Are not the pulps 1.0 or 2.0 yards without run-throughs? A They may be, but I have not seen most of them.

Examined by Mr. Baynes —

8937. Q. Do I understand that all the mowers in your Catferry are using safety lumps? A. In the fore-

Q. Are the wheelers as fast then? A. Yes.

8078. Q. The shell was worked on the road or using fire bricks? A. Yes.

5052 Q (P): I understand, further, that, after having considered the matter at a meeting of the underground employees, they requested the Manager to make the whole of these men use safety-lamps? A: Yes.

8241-0 And he refused? *It Yes*

803 Q What reason did you put before the Manager—that it was dangerous? A We told him that it was not safe to see naked bodies in the net.

Q How far do the small's data take them towards the top? A A good way in the main heading.

Q: I've been told that there is one danger with colored lights in a room: a danger consisting of light rays that are too bright. Is that true?

Q. Yes, I do. You think that is any danger with people going around wearing camouflage clothes, that they'll get lost? A. If there was a big power behind it, I believe it would cause that kind of trouble.

NOTE: Q. Two more if there was any gas mixed with the oil? A. Yes, it there was only a very, very small amount mixed with the oil, if there was conversion, it would light.

Δ. The answers contained in

5304 Q Is the more group? A Well, we think it so.
5305 Q Now the more group, is it a state

Q: Are the men, generally speaking, in a state of dread about the future? A: There is not much dread among the men here. And when we first started we kept up the agitation for a good bit, until the men here began to get the same feeling around spiritual affairs that we have here. A: Yes.

8176 Q The signals will be have all the main lines ground supplied with safety. Waaps? A The
8177 WTA. Q Yes, linked to the other two safety? A Then the only it was was safe to maintain the

with naked) a little and we are of the same opinion as to what is or is not the weight.

5173 Q He is a director of the firm. Manager has only a minor interest? A Yes, I think so.

Q We cannot say what he is qualified for.

holding them are competent to go through an examination? A Tex. we think that there should only be

8176 © Do you think that, if you had a thoroughly competent man to manage, you would have safety

The value of A in any option we could

Fe areas examined by Mr. Bruce Smith:—
SITE 6. You told us that the men were afraid to re-enter, even through the DeLage's Guard, on road of finding

Mg, 20000; Na, 10000; K, 5000; Ca, 5000; Fe, 5000; Mn, 5000; Zn, 5000; Cu, 5000; Pb, 5000; Cd, 5000; Ni, 5000; Cr, 5000; Co, 5000; Se, 5000; Br, 5000; I, 5000; Sr, 5000; Ba, 5000; La, 5000; Ce, 5000; Pr, 5000; Nd, 5000; Sm, 5000; Eu, 5000; Gd, 5000; Tb, 5000; Dy, 5000; Ho, 5000; Er, 5000; Tm, 5000; Yb, 5000; Lu, 5000; Hf, 5000; Ta, 5000; W, 5000; Re, 5000; Os, 5000; Ir, 5000; Pt, 5000; Au, 5000; Hg, 5000; Tl, 5000; Pb, 5000; Bi, 5000; Po, 5000; At, 5000; Rn, 5000; Fr, 5000; Ra, 5000; Ac, 5000; Th, 5000; Pa, 5000; U, 5000; Np, 5000; Pu, 5000; Am, 5000; Cm, 5000; Bk, 5000; Cf, 5000; Es, 5000; Fm, 5000; Md, 5000; No, 5000; Lr, 5000.

Examination sheet by Mr. Lenoir.

NAME: Q. What is your name? A. John Warner

818b. (1) What are you? *d.* A senior lecturer at the Metropolitan College, Helsinki.

8170 Q What did you? A A small, waiting at the headquarters of 8170 Q How long have you been there? A A little over seven years.

8160 Q How long an experience have you had? A About nineteen years missing, but I have been in a job since about nineteen-fifty, more.

Q281 Q. Before going to Helmsburgh where did you work? A At Kestonville, in Queensland, and at Queensland.

Q282 Q. Did you ever work in England? A Yes, for about an year altogether.

Q283 Q. Where did you work in England? A At Bell Berrington—the Park House, and at Belling and Vaughan.

Q284 Q. Now, which is the most queer mine that you have been in? A I should say the Skirretpoth.

Q285 Q. Did you visit Kestonville at the time of the disaster? A Yes.

Q286 Q. What were you doing there? A I could not exactly say.

Q287 Q. Roughly speaking? A I was in the Court Room at the time of the disaster.

Q288 Q. Do you know whether there were any safety-lamps available when you reached the mine?

A There were some when I got there.

Q289 Q. What was your experience as regards getting safety-lamps to go into the pit? A When we arrived there we went straight to the lamp room. We applied for lamps, but they were not available.

Q290 Q. To whom did you apply? A I could not tell you the gentleman's name.

Q291 Q. Was he the person in charge? A He was clearing a lamp at the time.

Q292 Q. What answer did he make? A That there were none available. We could not get lamps.

There were three or four gentlemen waiting to go into the mine at the time, and I believe that they got lamps after waiting some time.

Q293 Q. How long were you delayed? A I must have been there ten, hour or so, hour and a half, I did not stay at the lamp room all the time, but went round to the kitchen mouth.

Q294 Q. Had there been a supply of lamps, could you have saved some time? A Yes; in my opinion we could. I could have been in town before that time that I got in.

Q295 Q. When you did get in, were you in No. 1 Night section? A No.

Q296 Q. What section? A I think they called it the shaft district.

Q297 Q. Did you handle any bodies that were burnt? A No, I did not.

Q298 Q. Did you afterwards go into the mine to make an inspection? A No.

Q299 Q. Was that the only time you were in the mine? A Yes.

Q300 Q. You do not know anything about the disaster? A No.

Q301 Q. Now I will ask you about these recommendations. No. 1. "Managers, under managers, deputies, and shot-bearers, to hold certificates of competency by examination, and to have had five years' practical mining experience, before being eligible for respective positions." What do you say in support of that? A I think it is only right that they should hold these certificates, as we have pretty well to rely upon our deputies and managers.

Q302 Q. Take the Metropolitan Mine, do the deputies there hold certificates by examination? A I do not think they have certificates.

Q303 Q. The shot-bearers? A We have none. I think what is done at night by the deputies.

Q304 Q. You do not know anything about this proposal? A No.

Q305 Q. You know nothing of the qualifications of the men employed? A I take them to be pretty good men, but I do not think they hold certificates.

Q306 Q. You think they are pretty good men? A Yes, good, careful men, I have known them a number of years.

Q307 Q. Recommendations No. 2 is that "Inspectors should be vested with absolute powers to order the use of safety-lamps." A Yes, I think that should be done.

Q308 Q. Do you know of any colliery where the Inspector would safety-lamps to be put on, and the management refused? A I do not remember any.

Q309 Q. Recommendations No. 3 is that "Certificates by Examiners should be prohibited, and free elections." What have you at Helmsburgh? A A few.

Q310 Q. Have you ever been in a colliery where the prohibition was by farces? A I was in one in England, and in one in Queensland.

Q311 Q. What was your experience of a farce in Queensland? A You could hardly call it a farce, it was only a kind of large joke.

Q312 Q. Was it good to carry on? A No, it was very bad.

Q313 Q. Because of defective ventilation? A Yes.

Q314 Q. In the old country the air was good? A Yes.

Q315 Q. Recommendations No. 4 is "Waste workings to be absolutely sealed off, and recommended by select committees, for fear of accidents such return-air-courses not to come in contact with the intake." I wish to know what you do with the waste workings at the Metropolitan Mine, are they sealed off? A I do not think they are. I think the air course is through them, as far as I know.

Q316 Q. If it is not practicable to seal off a waste working, what can be done with it? A Certainly it should be sealed off.

Q317 Q. In addition, should the return-air-courses be sealed, so that the intake air cannot get into them? What I mean is that if good mining practice is allowed the intake air to pass through waste workings? A I do not think that it should be allowed.

Q318 Q. Recommendations No. 5—"All places, except prospecting drives, to have not less than 100 yards apart." What is the average distance at the Metropolitan? A I think the cut-throughs are 40 or 45 yards apart, but in the Welsh beds they are 100 yards apart.

Q319 Q. How often do you get Welsh beds, 100 yards apart? A Not very often.

Q320 Q. How many are there? A I could not give you any idea, short one half would be Welsh beds and pillars.

Q321 Q. I do not understand you? A One-half of the places in the pit would be Welsh beds, and they are from 100 yards without a cut-through.

Q322 Q. How is the air carried to the face? A By means.

Q323 Q. What sort of system? A Ordinary mining system.

Q324 Q. Does it become damaged? A It has a tendency to leave the roof.

They only take it up from one group to the other, over 8 feet or length, and it goes over in the middle.

Q325 Q. Had you notice loss of air because of this? A Yes, by the air going over the top of the entries.

Q326 Q. Has your working place been definitely supplied with air through the gaggles? A The one we were in last quarter is a heading.

Q327 Q. Have you worked at any of the Welsh beds? A I was in one of the present time.

112000—J. Rogers, St. Louis, Mo.

- 8124 Q What is the condition of the air lines? A The air there I am at present is very fine.
- 8125 Q What about the opening of the houses? A It does not vary from the usual a little. Nothing else.
- 8126 Q You are not getting any work of a better kind? A I was in one but a letter I got from 40 yards, and it got away from me. I got it down to the house and away from the house. I got it down to the house and away from the house.
- 8127 Q You think there ought to be more cut-throughs? A Yes.
- 8128 Q There are no cut-throughs at any 40 or 50 yards? A Yes.
- 8129 Q How you feel about the condition of the condition in the condition? A I do not think I complained.
- 8130 Q Had you reason to complain, whether you did or did not? A I could have complained last year. I do not say they would have fixed it up, but, owing to the way it is at present, it is not possible to keep it in this way.
- 8131 Q Is there any other way of looking at it? A If a better way taken across from one group to another, it could not get away from them.
- 8132 Q Was the meeting so bad that it was not a proper place to get out of? A It was not that bad—I think we had sufficient for a time.
- 8133 Q You put up? A Yes.
- 8134 Q Had you any reason for not complaining? A I had no reason for not complaining.
- 8135 Q What has been your general impression of the view of the Metropolitan House? A I could not complain about it myself. So as of the place were a bit more, but I could not complain.
- 8136 Q You have got used to the place getting worse? A It is worse, I think.
- 8137 Q What throughs were put in at 30 yards, do you think it would make the road? A No, I do not think it would make the road in the Metropolitan.
- 8138 Q Where there Welsh beds are being worked, if they were to put in cut-throughs, would it make any marked difference in the safety of the road? A I do not think it would.
- 8139 Q Do you know why they drop these Welsh beds in long without cut-throughs? A I have not the definite idea.
- 8140 Q What is the longest drive that you know of without cut-throughs? A The one I am now working in is the longest I have been in, it is between 60 and 70 yards—somewhere about that length.
- 8141 Q I will give No. 3 and go on to No. 7, which is that? A Mostly excavations and repairs should be made by day and night with the hydraulic ram. Do they mean to make the hydraulic ram on the Metropolitan? A I cannot remember. I do not know, I am not certain, unless one from the Manager. I do not know what kind of a house he has.
- 8142 Q I will give Recommendations Nos. 8, 9, 10 and 11. Now, with regard to No. 12, "Extra supply of water tanks and their equipment, equal to one third of the number of persons employed below ground, to be kept constantly in good order and ready for use." Do you know whether any tanks were sent from Halesworth to Kemble? A Yes.
- 8143 Q When? A The same evening.
- 8144 Q How many? A I cannot remember the number.
- 8145 Q How you a large reserve? A I think there is a good amount.
- 8146 Q How you a reserve stock of one third? A I would not say. I have no idea, I am not on the large side.
- 8147 Q You know there is a large supply? A Yes.
- 8148 Q Recommendation No. 13 is that "The travelling and baggage roads, and other places necessary, should be properly watered." What do they do at the Metropolitan? Do they water the travelling roads? A They used to water one section, as far as I am concerned, but it has not been done now for a long while past until they did it this week in one section.
- 8149 Q And the travelling road becomes dusty through not being watered? It is dusty, especially when the sun and horses go in the morning.
- 8150 Q Have much dust run? A Yes.
- 8151 Q Of course, there are no water lights anywhere? A No.
- 8152 Q When is this dusty part on the travelling road? A The dust is on the job bottom, to all the heavy vehicles in each district they are pretty well all alike.
- 8153 Q What is the distance? A They are different distances. I suppose the shortest distance would be 1 of a mile, and the longest distance about 14 miles.
- 8154 Q Have you ever known these dusty parts to be watered at any time? A Only three instances.
- 8155 Q How much accumulation of dust is there on the floor—what is the height of the dust from off the road ground? A I suppose is a good many grains it must be 2 or 3 inches, but it is mostly at the sides.
- 8156 Q In your opinion, would it be proper to water these travelling roads thoroughly? A Yes, it would be much better.
- 8157 Q Recommendation No. 14 is that "Managers should be encouraged to give more personal care and attention to the management of the Colliery." Who is your Manager? A Mr. Jeffrey is Under Manager and Mr. Robertson General Manager.
- 8158 Q How often do you see Mr. J. Jeffrey going through the pit—once a week or once a month? A I think we see him every week—say once a week. He may come a week occasionally.
- 8159 Q He is not the most severe a month? A Yes.
- 8160 Q That is your experience? A Yes.
- 8161 Q I gave No. 15 and go on to No. 16, which is that "The use of the machine should be enlarged." What about the machines in the Metropolitan—any that large enough? A I could not say much about them—I think they are quite enough.
- 8162 Q What are they? A About 6 feet deep and 4 or 5 feet wide.
- 8163 Q Now we come to No. 16, which is now made that "Instructions be given to employees regularly on the matter of escape." A Well, the work they have started at the Metropolitan is to keep the men out by a different way. Each deputy brings his own set. The first lot came out on Tuesday and another lot yesterday, and I suppose they will take each section—probably another section coming out to-day.

- 4208 Q Did you not see him?—What?—He was to be taken out?—There was a notice at the picket that we were to march down, get that, & send it out as we did.
- 4209 Q As different from the one which was put out below?—At the request of the men.
- 4210 Q Did you not object to go?—In 1886, last year. There was no work any alternative, because the other men were fixed off as bad men then.
- 4211 Q At the time then?—I was in the city on Tuesday last.
- 4212 Q Was this to be a large level demonstration to its end?—It is my opinion it is better that we should know the reasons.
- 4213 Q Was that done in the next sign?—Not exactly as not even late. The men broke off about half-past 5, and we had to meet the Deputy at 4 o'clock. It looks as if I should be out.
- 4214 Q Did you hear any speaking on the part of the men?—No, but Mr. Jeffery told me.
- 4215 Q Never mind what he told you. As first you knew, none of the men objected?—I never heard any one object.
- 4216 Q Reconciliation No. 10 is that 'The Coal Mines Act should forbid a strike-hill of employees being kept, and punishing the improper provisions of discharged persons obtaining employment.' You do not know at any Work out at the Metropolitan?—I cannot remember any at the Metropolitan.
- 4217 Q Do you know of any case in the district where men have been discharged, and prevented from getting employment elsewhere?—Not of my own knowledge.
- 4218 Q In your opinion if the proposed were adopted, would it tend to more reports being made as to the condition of a mine?—Would it give the men confidence in reporting anything that they may have observed?—I have only worked in the Metropolitan in the district, and none of the men there have any fear of reporting anything; I know I have not at any time.
- 4219 Q Reconciliation No. 20 is that 'Before lamps should not be introduced for shot-drag.' I suppose they are not allowed in the Metropolitan?—No.
- 4220 Q In your opinion, is it a dangerous thing to smelt a safety-lamp in a mine for this purpose?—I should think it would be.

Continued by Mr. Wain —

- 4221 Q With reference to that provision about a strike-hill—would it make any difference to the Metropolitan Mine?—I do not think so.
- 4222 Q Is it not you get into trouble if you do not report things?—You are liable to get into trouble if you do not report anything which is a rule, and I should say a man ought to get into trouble too.
- 4223 Q We have reported to the deputies at the Metropolitan now having been here before?—A little over seven years.
- 4224 Q Occasionally?—Yes, I have never been away from the mine.
- 4225 Q You have had a good opportunity of seeing whether the deputies were up to their work?—I have been under most of them.
- 4226 Q Have you ever?—Yes.
- 4227 Q Is there any reason to say that these men are not competent to do the fire work?—No—but as far as the Metropolitan deputies are concerned, I could not say such a thing.
- 4228 Q Have you all of them a good knowledge of all that they ought to know with regard to the work?—I think they know it very well, but we have some positions if they had not.
- 4229 Q Do you know whether there were had been at work in the mine before being sent to the positions of deputies?—Yes, I am sure they are all that they have all worked in the mine.
- 4230 Q And they rose from working in the coal to the position of deputies?—Yes.
- 4231 Q Have you ever considered the question of not through wearing the hat?—I spoke of the matter not to officials, but to my wife and partly to all of the men here before about it at one time or another. I do not think you can read anything from the hat—[he's excited].
- 4232 Q I am talking about not through. You said that not through at 100 yards distance from as he other could not within the hat?—I cannot say myself, but the hat though not very safe, and the mine is well sheltered.
- 4233 Q You were told that one of the men who had to go and inform you?—The old man always object, but he was complaining about going out that way.
- 4234 Q Did he say that he was the way out by the hat?—The old man said that as a reason. I do not see how he could have his way out by that hat.
- 4235 Q That was the first effort made to show the men out?—Yes, last Tuesday was the first time.

Continued by Mr. Henry Smith —

- 4236 Q What is the longest heading that you know in the Metropolitan, without cut through?—Without cut-through?—I think they have all got cut through.
- 4237 Q What is the longest distance—you said 160 yards?—I said 140 yards.
- 4238 Q You said there was one 240 yards?—That is one of the Work heads.
- 4239 Q Is that is the longest distance—100 yards without a cut through?—Yes.
- 4240 Q With the exception of a little sagging on the top that works well?—Oh, yes, the same as works well.
- 4241 Q Have you ever been as a part of the men where the men are, some hundreds of yards, and they hang the air by means of pipes?—I think pipes are used somewhere, but I have never been in that part of the mine.
- 4242 Q Have you ever seen as they mean but then once in the district?—No, not in the district.
- 4243 Q You can only speak of the men as a whole then?—The air is satisfactory.
- 4244 Q You complain of the dust?—Oh the dust on the travelling road.
- 4245 Q You say that it is, but that is more pleasant in 5 inches thick?—Yes or three inches thick.
- 4246 Q Suppose you take a screen—say a foot at the end—and gather up all the fine dust. What would it weigh?—I have not the instrument, I cannot tell you.
- 4247 Q Would it weigh 1 lb. or 1 lb. or 20 lbs?—I have no idea.
- 4248 Q Do you mean that there is a uniform depth of dust all across the road?—Where you walk you kick it along, but there is more at the sides.

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WYNN: Q You have no other complaint to make about the dust? A I complain about it being dusty—

Q. You do not think that there would be any danger? A. Only by explosives.

1641. Q Then you think there would be? A Yes, only by explosion.
[The Commission at this time adjourned for luncheon.]

[The Commission on the go. adjourned for business]

(On returning at 3 p.m., Mr W. H. Frost attended to take shorthand notes of the evidence and proceedings.)

Q. JOHN EATON, previously sworn, was further examined as under:—
Examined by Mr. Solicitor

NOTE: Q. With regard to the result seen in Questioned, where you said that the farmers was only a few grains, if there had been a proper furnace, probably there would have been no defect in the installation?
A. It might have been better if there had been a proper furnace, what we had was absolutely no good.

It was a large, fat girl standing on three legs.

8212 Q Do you know, speaking of the Metropolitan Collary, whether the waste workings open out on the surface anywhere? A I believe they are open to the air-sources. They are not sealed.

Q How do you know it was that extra mile to the stake? A No

NOTE. 4 You do not know what the open end of the exercise is. 5 I said that I did not think that it would make any difference to the result.

question Q: It is not a matter of the roof exactly? & I thought that was the way the question was put to me.

Q: That is not the point. Were you alerted, in both books and in the pillar writings, that the timber was crushed and that the bottom is heaving up? A: Yes.

8499 What causes that? A I cannot say exactly, I would put it down to the weight on the rubber, but I may be wrong.

522. Q The weight of the straw overhead. Do you not see that the effort of giving up the pleasure of having large pillars, and adopting much smaller ones, by making cut-throughs every 20 yards, would be to increase the crush on the pillars? A It might be on the pillars; but in the heading which I was speaking about—[interrupted]

NOTE: The more we utilize \mathcal{P} & \mathcal{H} symbolically & so,

str8: You have what cash is? A Tre

Q Do you know that it brings on stress? A Yes.

Q Have you heard of any daughter of this country through police being harassed? A I do not think I have, strapping up Brown Hill way.

Q I mean is a real wing distrib—in Newcastle? A I heard of a covey in the Mariposa; but it was before my time.

Q Have you heard of a Chapter of the Royal Society? A Yes

Q Do you know whether the crew would be supported by small pilots? A I suspect whether it would or not.

4232 Q. Do you not think it is good practice and good management to have large pillars? A. I do not think it would make that much difference. It may do so.

Q: If you found a group as much going on what steps do you think as a pastoral man, should be taken to prevent it? A: I think that the best step would be to rather a web site.

NOTE: Q: I want to prevent such a thing occurring. A: I could not say what steps ought to be taken to prevent it. There may be different things which cause it to occur. It may be a large fall which brings it on.

8142 Q What do you think generally causes it? J. Budden might point to it.

1000 Q: A police officer is going to what? A: On the scene.

Q Do you not think that larger pillars would prevent it? A Large pillars would be stronger with Q

8085 If you cut a large pillar it would weaken that pillar, would it not?
8086 With reference to the business staying—you know it is important.

can you? *A* I do not think they can altogether do without it, but I have seen them do without it in the Welsh lands.

Q227. Q Before the passing of the 1896 Act there were many lands without lessees, but you are the man who asked to have that state of things remedied? A I cannot remember a case where they have done

Q I presume that leakage of air is inevitable? A It may be to a certain extent, but I think it would be better than it is now, if the locomotive was hooked up to a battery.

Q Do you know that, when it is tucked up first, it is flat and straight? A Yes.

3240 Q And that the cause is not the bushes sagging but the roof being irregular? A Yes, but there are any amount of places where the roof has overstepped, so far as the naked eye can see, and the bushes come in from the roof, although the roof is so solid as rock, it was

Therefore, if the legacy of an era has had, you would expect to find gas in the working bore? A 14 survey was made—I deny they do occasionally.

Q Have you ever found it? A I have not found it myself, I do not say it could not be found to

8-112 Q Do you think that it is absolutely necessary to carry all the air up to the working face, without enough of it there is sufficient to dilute any gas that may be given off? A The more air you get the better.

enough to think it true, but to be able to say you think it's true is not to say it is. O Lord you are not good enough! I do not condemn myself!

8.115 Q Are there any planes in the mine besides the working planes, which require to be ventilated?

Q Do not believe there is a good purpose? A I do not understand you.

Q247. Q. Do not leakages of air through the doors, the hatches, and culvertways through the stoppage serve a good purpose? A. There are leakages there—I have heard of those—through both the hatches and the stoppage.

18247. Q I asked, do you not think that they serve a good purpose? A I could not exactly say, perhaps they may. I have had no experience in that matter.
18248. Q Do you know what conclusion there is there? A I do not know.
18249. Q Do you know whether it is small or large? A It is pretty large.
18250. Q Would it be possible to have that large conclusion if you attempted to carry it? Is the air into the working shaft? A I cannot say whether it would be possible to carry it all the air there, perhaps it would not be.
18251. Q Speaking of these places being warm, what temperature do you think they would be? A I find that the place was warm in the morning, by the time we got down the length of the cut-through.
18252. Q When was that? A Last quarter.
18253. Q Do you know what was the natural temperature? A No.
18254. Q Would you be surprised to know that it is 50°? A It might have been, I never saw it. I never saw the temperature taken.
18255. Q You have a clock inspection going round? A We had one there this week, not in the back heading, but the one went to it. Last Monday we had Mr. Warren there.
18256. Q I am referring to your own clock inspection? A There have been clock inspections there.
18257. Q Do they not take the temperature? A I think they do.
18258. Q Do you not know from the report? A They would report on it.
18259. Q If the natural temperature is 50°, you would not expect to find it so cool as a winter day on the surface? A No, certainly not.
18260. Q You would not expect to find it otherwise than warm? A No, you would not expect it very well.
18261. Q As to the watering of the roads. You say the roads are dirty, which is perfectly true. I think you said you would like them to be watered? A I should make them much better if they were watered.
18262. Q You know that water has been very scarce at Hildesburgh for many years? A Yes. The last year it has.
18263. Q You know the Company have to expend a large sum of money in bringing water from Sydney for the horses? A Yes, on a few occasions when I have been there—that is during the past seven years—I have known them to bring water. The remainder of the time they have had enough.
18264. Q Enough for what? A Enough for watering the travelling roads. I do not think it would take a great deal.
18265. Q You have not gone into any calculation in connection how much it would take? A No.
18266. Q Do you know how many miles of roads would have to be watered? A No, I do not.
18267. Q Have you any idea how many miles of main roads, railways and stations, there are in the Colony which you are working at? A Do you mean all the travelling roads put together?
18268. Q Yes, and all the railways and stations? A I should say 6 or 7 miles.
18269. Q Would you be surprised to learn that there are 20 miles, without counting the back-roads. A That would depend on the number of return excursions.
18270. Q Of course it would—would that imply your opinion as to the practicability of watering them? A I should say that the more you are travelling on, the more it would be watered.
18271. Q What do you want them watered for? A To settle the dust.
18272. Q What is the object of that, is it a matter of comfort to the men? A It would be a matter of great comfort to them.
18273. Q Did you not say something about something happening on the ground of an explosion? A I think I was asked the question if it would be dangerous, and I said it would be, on the ground of an explosion.
18274. Q You would water the travelling roads, that is your suggestion? A They should be watered.
18275. Q Would not an explosion travel through one of the main air-courses so much as it would along a travelling road? A I do not think it would.
18276. Q What would be the use of watering one road unless you watered them all? A It would do them no harm to water them.
18277. Q You think it would have no explosive effect on the road? A It might here, but I should hardly think so.
18278. Q Have you never heard of water exploding a road? A I have heard of it on opening the blast.
18279. Q Does it not rise up to itself, does it not? A Yes, you may have a rise like that, but perhaps only once in twelve months.
18280. Q Is it not a fact that all these miles of roads are timbered? A Yes.
18281. Q What would be the effect of constant watering on timber in a hot sun? A I cannot say.
18282. Q Would it not rot the timber? A I do not think it would be necessary to have the water closer than within a few inches of the timber.
18283. Q Does not the dust of the dust lodge on the timber? A Yes, it lodges on the timber, but that is not the dust that rises up when the men are travelling up on the roads.
18284. Q Of course, if your idea is that we should water the main for the comfort of the men, I can understand your suggestion that we should water the main daily, but, if the waterings for the purpose of stopping an explosion, you must water all the roads, the timber, and the sides, as well as the bottom? A I think that, if there was not a particle of dust, it would not stop an explosion.
18285. Q What would not stop an explosion? A The dust.
18286. Q I do not quite follow you—you are as long as you have dust on the roadway, whether on the side or on the timber, an explosion might travel along the road? A Yes.
18287. Q If you only water the floor, and do not water the timber, the waterings practically useless. A I do not think it would be useless as far as an explosion is concerned.
18288. Q Do you know what system of firing shots is adopted at the Metropolitan, is it the naked light, or the wet, or what? A I have never seen one fired since I have been there. I have heard them when I have been on night work. They water the place thoroughly, well, that is as far as I know.
18289. Q You have never been near one when it was fired? A No.

Examined by Mr. Baynes—

18290. Q You said that you could have complained about the ventilation on some occasions? A I could have done so last quarter.
18291. Q Did you think that the air was not sufficient? A There may have been a proper amount of air coming in, but at the same time I felt it warm.

- 6092 Q What was your year made of? A Not into the bedding.
6093 Q Was it made of light willow? A Yes, kept well up to the feet.
6094 Q Was it made of light willow? A Yes, kept well up to the feet.
6095 Q Was it made of light willow? A Yes, kept well up to the feet.
6096 Q Was it made of light willow? A Yes, kept well up to the feet.
6097 Q Was it made of light willow? A Yes, kept well up to the feet.
6098 Q Was it made of light willow? A Yes, kept well up to the feet.
6099 Q Was it made of light willow? A Yes, kept well up to the feet.
6100 Q Was it made of light willow? A Yes, kept well up to the feet.
6101 Q Was it made of light willow? A Yes, kept well up to the feet.
6102 Q Was it made of light willow? A Yes, kept well up to the feet.
6103 Q Was it made of light willow? A Yes, kept well up to the feet.
6104 Q Was it made of light willow? A Yes, kept well up to the feet.
6105 Q Was it made of light willow? A Yes, kept well up to the feet.
6106 Q Was it made of light willow? A Yes, kept well up to the feet.
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Mr CHARLES JORLAND was sworn and examined as under —
Examination is made by Mr. Knight.

- 6201 Q What is your name? A Charles Jorland.
6202 Q What are you? A A miner.
6203 Q Where are you working? A At Helmsburgh.
6204 Q I think you are a member of the Delegation Board of the Helmsburgh Miners' Union? A Yes.
6205 Q Did you come to Helmsburgh at the time of the disaster? A Yes on the night of the disaster.
6206 Q What time did you come to Helmsburgh? A About half past 10 o'clock.
6207 Q Did you go into the mine? A No.
6208 Q Do you know anything about the supply of safety lamps available that night? A I know very few of them about there. I was prepared to go into the mine, but I could not see any lamps to spare.
6209 Q Did you look for any? A I made enquiries, but they said there was a scarcity of them.
6210 Q You could not get a lamp to go into the mine with? A No.
6211 Q But you afterwards got in with a party of spectators? A No.
6212 Q You did not? A No.
6213 Q You do not know anything about the disaster? A No.
6214 Q You are familiar with the recommendations made by the Delegation Board? A Yes.
6215 Q Have you been a complete copy of those recommendations? A Yes.
6216 Q Do you approve of them? A Yes.
6217 Q Mr. Jorland, the words in the recommendations were, "if necessary, to the extent of the report." A Yes.
6218 Q You were one of a committee who inspected Mount Kemble mine on the 25th and 26th of April and the 1st of May, 1900. You furnished the report, signed by you and C. H. Eggeson, in the year ended report? A Yes.
6219 Q Mr. Jorland, I tender the report.
6220 Q (Hears) put it in and marked Exhibit 100.
6221 Q What is suggested from the report, Mr. Jorland? A On the 25th and 26th of April the underground manager of Mount Kemble, Mr. Lewis, and on the 1st of May, Mr. Wilson. He was deputy at that time. He was underground manager afterwards, and was killed in the explosion.
6222 Q On any of those visits was the pit not working? A Yes, on the three days — the pit never worked.
6223 Q Were there any men in the pit at all while you were inspecting it? A Only the officials, that is, the deputies.
6224 Q You never saw a working man there? A No.
6225 Q Did you make any inspection whatever of any of the work workings? A No.
6226 Q Let me draw your attention to this plan. Here is No. 1, right engine road. There is the main shaft. You see of the lower houses. No. 1, main level and No. 2, main level and No. 3, main level.
6227 Q No. 1, right engine road? A I think I recognize them.
6228 Q Do you remember being on the No. 1, right engine road? A Yes.
6229 Q Do you remember being along the No. 1, right engine road, towards Peter's Flat? A I cannot imagine the thing very clearly, but I understand the rope runs and the hoist.
6230 Q How many hoists did you remember? A Oh, about one half of the hoist which you did not see.
6231 Q What was the day of your examination as regards the rope runs and the hoist, the others were not working? A The others were not working at the time I was there, and the others were not working with it.
6232 Q You think that the other corresponding hoists were like it? A If I went into two or three hoists, and found two or three hoists, I should know the size that those I missed were like those I found.
6233 Q

- 8445 Q Was that your point of view? A Yes.
- 8446 Q Did Mr. Lusk say "No"? Because you were not at all of a good opinion. No. I might not be called a good hand? A I think you were. I think that I was not at all of a good opinion. They were all pretty much alike.
- 8447 Q Who suggested that? A Mr. Nelson.
- 8448 Q Did you remember to what point of view you were Mr. Nelson suggested to you not to test these birds? A I remember.
- 8449 Mr. Wade: He said he did not want to test the birds.
- 8450 Mr. Lusk: At what point of view? Was it Mr. Nelson suggested it? A I am not familiar with the means of any of the detectors. I have thought in a few cases of it.
- 8451 Q That is the 4th hole testing now? A Yes, that about on half of the birds were suggested. What about the pillars? A The pillars of the shop were tested about half of them—and also the longwall workings.
- 8452 Q How long were you kept doing one test? A I just depended, we might spend a quarter of an hour, three or even half an hour, or pretty nearly an hour. You might sit down in the face of the hole.
- 8453 Q Had you ever been checked before? A No.
- 8454 Q Did you know what the duties of a check inspector were? A I had a pretty good idea of what was laid down for me to go by.
- 8455 Q As regards your own mine, do you know anything about it? A I worked in it about eleven years ago. It is a different mine along the main line on what it was when I worked in it previously.
- 8456 Q When did you depend on to take care of the various places in the Keokuk Mine? A I relied on my partner, Mr. Higgins.
- 8457 Q How you depend when Mr. Nelson suggested that you should not go into some of the holes? A I did not object. I agreed that it was my goal to test all these places, when the men were not at work.
- 8458 Q Summing it all up, I suppose I should put this in. As far as the waste workings were concerned, they got an examination at all, and as far as one-half of the holes and one-half of the pillars were concerned, they got no examination. A There is something about it. Of course I saw the waste workings while I was in the pillars.
- 8459 Q Is that a fair statement of the inspection? A Yes.
- 8460 Q Is your opinion, looking like a check inspection of the colliery was made? A It seemed satisfactory. I was quite satisfied.
- 8461 Q As a matter of fact, you did not know that the pit was not going to work? A No.
- 8462 Q You did not know that the pit was not at work until you reached the pit mouth? A No.
- 8463 Q Why did you make an examination on the day that the pit was not working? A I did not know on what day the pit was going to work again. I might have stayed there a week, and it may not have worked.
- 8464 Q Who had the lamp? A I had the lamp.
- 8465 Q Had Higgins a lamp? A A flare lamp.
- 8466 Q What did Nelson have? A A flare lamp and for part of the time an old flare lamp.
- 8467 Q What did Lusk have? A A flare lamp.
- 8468 Q Was any part of the same examined by Higgins while you examined another part? A No.
- 8469 Q You all kept together? A Yes.
- 8470 Q What time did you go in in the morning? A Between 3 and 4 o'clock.
- 8471 Q What time did you go in in the afternoon? A Between 4 and 5 o'clock.
- 8472 Q Well, you went, as far as the detectors of gas is concerned, the examination was practically complete. I am not saying anything as regards the roof, because you gave that care? A I do not hardly grasp that.
- 8473 Q I am on your report when you mention defects in the roof, but as to the detectors of gas there is not one word. You have admitted, in fact, that you did not examine the wastes, and that you did not examine half the holes and half the pillars.
- 8474 Mr. Wade: I object to that. The witness said he examined the wastes while at the pillars.
- 8475 Mr. Lusk: Well, I will leave him to you.

Cross-examined by Mr. Wade—

- 8476 Q Were you elected by the Keokuk Lodge to make an inspection? A By the District Lodge.
- 8477 Q You were on the committee? A Yes.
- 8478 Q You have had experience at gas there? A Yes, a little.
- 8479 Q You have worked with a safety lamp for some time? A Yes.
- 8480 Q Did you make any examination at Keokuk for gas when you thought there was a likely place to find it? A On two or three occasions I did. Of course, when I went in the mine with a safety lamp, they said "It is no good bringing a thing like that here—we have had no gas reported for twelve months." I took their word for it, and was in my duty.
- 8481 Q You did examine for gas? A At two or three places.
- 8482 Q Were they different places? A Yes.
- 8483 Q What kind those places? A One group called it, you or Higgins? A It was my own idea.
- 8484 Q Did you find any gas? A No.
- 8485 Q Did Higgins use a safety lamp? A No.
- 8486 Q Did you do all the looking for gas yourself? A I think, if there had been gas in any quantity, Higgins would have found it with his safety lamp.
- 8487 Q Now, so far as you are concerned—I do not say you did not do your duty—but I want to know when you did decide you remember being round the 35-acre goaf? A No. I do not remember being there at all. It was never pointed out.
- 8488 Q Did you go in the different places in the mine? A Yes.
- 8489 Q Do you remember a place at the end of No. 1? A Of course, I was in there.
- 8490 Q Do you know that these are the highest points in the mine? A I can believe that they are.
- 8491 Q Could you not see that you were wrong? A Yes.

8544. Q Did you ask him, or did he volunteer the statement? A He volunteered the statement.
 8545. Q Do you know it is difficult to get persons to accept the position of check inspector? A Yes.
 8546. Q What is the difficulty? A Here we aimed to take the position.
 8547. Q Why are they afraid? A I can hardly say.
 8548. Q You know they are afraid? A It looks like it. I was the only one that stood for the position.

Examined by Mr. Robertson:—

8549. Q How long have you been working at Melbourne? A Three or four years, more or less, off and on. I suppose I have been working there ten or six years, between 1870 and the present time—that is, on two or four different occasions.
 8550. Q You know all about gas? A I know a little about it—I can detect it.
 8551. Q You are quite able to detect gas? A Yes.
 8552. Q You were not afraid to take the position of check inspector? A No, not at all.
 8553. Q Do you think there is any reasonable ground for the fear that exists about taking such a position? A No.
 8554. Q You never suffered from anything of the kind? A No.
 8555. Q You never heard of anybody being cautioned for having accepted such a position? A No.
 8556. Q You have no fear of complaining to-morrow if you saw anything wrong? A No.

Examined by Mr. Briscoe:—

8557. Q Did your companion, Mr. Rogers, suggest looking for gas? A No; he never made a suggestion of any description.
 8558. Q These places you did not visit—they may have had gas? A I cannot say what was in the places I did not visit.
 8559. Q Did your companion suggest the advisability of visiting the waste works? A No.
 8560. Q You depended on him seeing that he was a local man? A Yes.
 8561. Q Are you satisfied now that there is a great deal which you ought to have seen and did not see? A I am satisfied now.
 8562. Mr. Wade: But I understand from Mr. Lynght that with the exception of the witnesses from Gunnedah his case is now closed?
 8563. Mr. Lynght: I have two witnesses from Gunnedah and one from Appin. I have also received information to day which may lead me to call witnesses who have been at Krimla and who are now at Newcastle.
 8564. Mr. Jones: It will only be by special leave of the Commission that those witnesses will be called, because I take it that it would be impossible for Mr. Lynght to secure their attendance by Tuesday.
 8565. Mr. Lynght: I will ask you to allow me to call in Sydney any witnesses whom I may have available, but whom I may not be able to call next day. I may say there are no more witnesses available now.
 8566. Mr. Jones: It may be found more convenient to call certain witnesses in Sydney. It may be that the Commission may desire to call them, but I am afraid that we cannot keep the case in anything like its present order.
 8567. Mr. Wade: If necessary, I suppose I can call other witnesses in reply.
 8568. Mr. Jones: Yes, I presume that would be so.

[The Commission, at 3 o'clock, adjourned until 11.30 a.m. on the following Tuesday.]

FRIDAY, 21 JANUARY, 1939

[The Commission met at its Court House, Wednesday, at 11.30 a.m.]

Present:—

C. E. B. MURRAY, Esq., D.C.J. (PRESIDENT)

D. A. W. ROBERTSON, Esq., Commissioner. D. RITCHIE, Esq., Commissioner.

Mr. Bruce Smith, Barrister-at-Law, instructed by Mr. Wade, Crown Solicitor's Office, appeared on behalf of the Crown.

Mr. A. A. Atkinson, Chief Inspector of Coal mines, assisted Mr. Bruce Smith.

Mr. A. A. Lynght, Solicitor, appeared on behalf of:—

- (a) the representatives of deceased miners, widows, etc., (partners of the deceased);
- (b) the employees of the Mount Krimla Colliery (miners, washers, etc.), and
- (c) the Mount Krimla Colliery Employees' Association (the Southern Mines' Union).

Mr. C. C. Wade, Barrister-at-Law, instructed by Mr. F. Cuthbert, Esq., on behalf of the Mount Krimla Coal and Oil Company (Proprietors of Mount Krimla Mine).

(Mr. F. Cuthbert, Secretary to the Commission, was present to take shorthand notes of the evidence and proceedings.)

Mr. J. WYNN was sworn, and examined as under:—

(This witness was called at his own request, and the Commission asked Mr. Bruce Smith, as a matter of convenience, to conduct his examination in-chief.)

Examined by Mr. Bruce Smith:—

8569. Q What is your name? A John Wynn.
 8570. Q What are you? A I am a contractor in a small way.
 8571. Q But what kind of contractor? A chiefly in building.
 8572. Q I believe you have had some experience of coal mining, have you not, at some time in your life?
 A Yes, nearly twenty years.

8544. Q Did you ask him, or did he volunteer the statement? A He volunteered the statement.
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 A Yes, nearly twenty years.

- 8272 Q In what capacity? A From a boy of 10 years —
- 8273 Q Up to —? A Up till getting coal.
- 8274 Q After that have you ever acted as deputy or check inspector? A I have acted as check-inspector since leaving the mine.
- 8275 Q Did you ever hold any position beyond coal-getting as deputy, or under-manager, or anything of that sort? A No, I never sought one.
- 8276 Q You have been asked, some years ago, to act as check-inspector on behalf of the miners in some mine. What mine is that? A For the strike of the district—Ilwaco.
- 8277 Q What was that? A It was about February, 1903.
- 8278 Q Can you tell me what mine you inspected in that capacity? A I have inspected all mines in connection with the Mount Kearsley Association.
- 8279 Q Along the coast? A Along the coast, all of these ones, and one here.
- 8280 Q Which one was it? A Mount Kearsley.
- 8281 Q Then, within what period was all that done? A That was done from March, 1903, till December, 1904, twenty-one months.
- 8282 Q Were you constantly occupied on that work during that time? A No, I resigned because I had not enough to do,—mainly that was the reason, as I wish. It was a big mine with my other business.
- 8283 Q You did your other work in the meantime? A That is right, not having much to do, I resigned.
- 8284 Q Did you make reports of your inspections? A Yes, many one.
- 8285 Q Where you these reports? A Not many. I have some with me.
- 8286 Q Have you them here? A Yes. I have two or three here. I have with me all that I have.
- 8287 Q Are there any facts in connection with these inspections that you wish to put before the Court? A Yes.
- 8288 Q Perhaps you will tell me what they are generally, and then I may ask you to produce the reports. What are the principal facts that you wish to put before the Court? A The first thing that I would say would be in connection with the first inspection of Mount Kearsley. I know, in connection with that inspection, that there were some serious faults in the management of the mine.
- 8289 Q Have you your report of that here? A No, I have not.
- 8290 Q Did you commit those faults, which you are now about to give me, to paper? A Yes.
- 8291 Q And who has that report? A Well, I wrote three reports. One was before the mine immediately at the close of the inspection.
- 8292 Q You made three copies of the same report? A Three copies of the same report.
- 8293 Q One was left at the mine, go on? A And one was sent to the local miners' lodge at each colliery, and one was sent to the General Secretary of the Association.
- 8294 Q Did you ever send a copy of it to the Department? A No.
- 8295 Q Or to the Inspector? A No.
- 8296 Q Did you ever send a copy of it to the Mine Manager? A At Kears?
- 8297 Q At Kears? A The next day before I left the colliery.
- 8298 Q What was the name of the Manager of Mount Kears then? A I think the Colliery Manager's name is McDermott, and the under-manager that accompanied me is named Phillips.
- 8299 Q You gave me more information than I want at once. Who was the Manager at that time? A I think Mr. McDermott.
- 8300 Q Did you show it to him? A I never saw him at all.
- 8301 Q Your answer is "No." Did you show it to the under-manager? A I wrote it on a book.
- 8302 Q Did you show it to the under-manager? A I did not show it. I left it there.
- 8303 Q You left the book then with the under-manager of the Mount Kears Mine? A Yes.
- 8304 Q And that would be in about the beginning of 1903? A I think you said February? A No, that would be in about April, 1903.
- 8305 Q Then your entry of the report was made in the regular book? A Yes; that is it.
- 8306 Q There had been other reports on that book? A Yes.
- 8307 Q That would be in what month of 1903? A I am not sure—about April.
- 8308 Q You told me you began in February; and that Kears was the first you did? A I will have to explain still further in order to be clear. In February I was asked by the Bank, owners if I would stand nomination for this office. I consented to do so. Then the nominations had to go down to the miners, and the election took place as near as I know in March. I commenced my duties in April—nominations about April.
- 8309 Q Now, will you tell me what were those facts, which you discovered in connection with Mount Kears, which you entered in the book? A Well, in one district, where they were working pillars, we found some blacking.
- 8310 Q What light did you use in going round? A I always carried a safety-lamp, but the others that accompanied me in that mission carried flame lights.
- 8311 Q The other check-inspectors? A Yes, and the under-manager.
- 8312 Q Did you object to that? A No, sir. They told me there was no gas seen for a long time previously, and no safety lamps were used, so I could not object to it.
- 8313 Q And you did not think it dangerous? A I did not.
- 8314 Q Did you say for gas with your lamp? A Only in old workings. In nearly every colliery I went in several places — [interrupted].
- 8315 Q Just under the ground in Kears at present,—did you find gas in Kears? A I did, not explosion gas.
- 8316 Q Black steam I suppose? A Yes.
- 8317 Q Did you find it in any quantity? A Well, not a very large quantity. It was more pink color than in any working place, one level, one pillar.
- 8318 Q You did make a strong—what sort of water workings were they? A Well, of course, in pillar work it means that they are taking out the supports of the roof—that is, the main body of the coal.
- 8319 Q You reported that? A Very truly, because I reported that the men should be removed to another place immediately.
- 8320 Q You did report? A I did, and the under-manager complied with the request; and consequently I did not make any great trouble about it.

8918 Q But you did report it badly. Now did you find anything else in Mount Kiam that you thought important? A I found no matter what, but as there was nothing there in my opinion, had nothing like the country of an area that they should have had.

8919 Q Could you name these—have you named them in your report? A One place would be called Belle's landing. I am speaking from memory. I have not had the privilege of seeing it lately.

8920 Q We may have some trouble—have you mentioned these three places in the report? A Yes.

8921 Q We also get the report, you found these places mostly unvisited, did you mention that beyond the report, did you mention that to the Manager or the under-manager? A Yes, the Manager was with me at the time, and he pointed in these other cases too that the men should be removed.

8922 Q I thought you said the under manager did that? A Yes, the under-manager.

8923 Q I asked you about the Manager? A I never saw the Manager.

8924 Q Then you mentioned it in the under-manager, the same as you had done with the black sheep? A Yes, he was with me at the time to check it himself.

8925 Q What was done in consequence of that,—was any statement made at the verification? A I never went back, I could not say.

8926 Q You mentioned those facts in the report. Now, was there anything else in Mount Kiam on that first occasion which you think it important to mention here? A The only advice I thought I think that was made was in connection with the black-sheep. It was in a very bad condition from wet and dirty—mud, I recommended that it should be cleaned.

8927 Q Cleaned up? A Yes, cleaned up, and kept a lot better.

8928 Q That also you put into your report? I think your Honor, it would be well for the Commission to prepare that report to be produced.

8929 Mr. Wynn: Yes. There are these copies but it does not appear which is the most easily accessible.

8930 Mr. Bruce Smith: I should think the Manager's copy at the mine would be most easily obtained.

8931 Mr. Wynn: If the Manager is to be called Mr. Wade, you might ask him to bring this report with him.

8932 Mr. Wade: As a matter of fact, your Honor, I do not appear for anybody outside Mount Kiam. I have got no information from Mr. Jones, the present manager of Mount Kiam Mine, that he wants the two dog-eared referred to in Gleason's evidence last week to be introduced before the Commission, and I would suggest that these men might bring that book down. I have no control over Mr. Jones of Mount Kiam in any way, but I have no doubt they will bring the book if the Commission ask them.

8933 Mr. Wynn: I suppose the Manager keeps it keeps those books at the mine?

8934 Mr. Wade: Yes.

8935 Mr. Wynn: Then he might or might not care to hand the documents over to the depositions and if the Manager or the under-manager is coming here he might be requested to forward this document.

8936 Mr. Bruce Smith: I think Mr. Garlick might want to see and ask him.

8937 Mr. Wynn: The only matter is to give him timely notice in order that he may be able to find it.

8938 Mr. Bruce Smith: Mr. Garlick will communicate with him and ask him when he comes to bring that book?

8939 Mr. Wynn: Yes.

8940 Mr. Bruce Smith: O. Is that all you wish to say generally about the first visit to Mount Kiam? A There is just one other thing in the mine below where the black-sheep existed there was a very serious fall of stone in the narrow alley—so much so that we had great difficulty in getting along over it.

8941 Q Did you mention that in your report? A Yes.

8942 Q You were there was not sufficient space from the top of the fall to the road to let the air pass freely? A I mean that the fall ought to have been cleaned up.

8943 Q To give a free passage for the air? A A free passage to the air. It was blocking the air—stopping the current.

8944 Q Is that all with regard to your first visit to Mount Kiam? We shall have the book here, you see. A I think so.

8945 Q I take it that all you saw there which you thought important you mentioned in the report. Now, will you tell me of any other mine in the district which you wish more particularly to mention to the Commission? A Well, I might say that my principal object in coming to the Commission was to speak about, or to give some facts in connection with, the question of the position of black-sheep being held by other outside miners.

8946 Q Very well, just say what you wish to say about that. A Well, when I went to Mount Kiam

—[interrupted]

8947 Q What was that? A That I could not remember, really, but something about May.

8948 Q Of which year? A 1904, about a month ago, as I should think that year. When I went to Mount Kiam my wife was named Widdison, a man who was black-sheep, at the time.

8949 Q We will assume my wife was named Widdison, a man who was black-sheep, at the time. He was named me to Mr. Letcher the under-manager, informing him that I was there to make a check inspection of the mine. Mr. Letcher asked me where I worked. I told him where I was working at the time, and what I had on generally. "You do not work in the mines, then?" he said. "No," I said. "I do not."

8950 Q Then I do not see what right you have to be here? "Oh, well," I said, "that is not my business. I am here to make the inspection. If I am allowed to do so, and, of course, if I am not allowed to do so, somebody else will see mine the matter, I suppose."

8951 Q Oh, well, I cannot allow you to go in, he said. And so, with that, he said, "With a warning, was made, and I will go and see the Manager."

8952 Q He went across to the Manager's house, and came back saying it was all right and Mr. Rogers came with him too. They said it was all right, and I would go to and make the inspection. I went to my tent, in my opinion, Mr. Letcher was right. The law does not allow where these private miners to be checked

—[interrupted]

8953 Q That is to say, men who are private miners at the time they make the inspection? A "Private working miners," I think is the meaning of the law, and, in my own interpretation of it, I had no right to be at the office.

8954 Q You think that Mr. Letcher was right? A Yes, and I think the law should be amended in that respect. That is the one thing that I want to bring before the Commission.

8955.

1055 Q You want to say that if a man has the experience, although he may not be a working prior of the man, he should be included among the men who may be chosen by the men? A Yes, I think it is much more important that he should be included than the working women.

with Mr. Wilcoxon: Do you say the law does not allow it?

6603 Mr. Bruce Smith: He says that he shares Mr. Lott's view was right; and that, as he was not a
6604 practical working economist, the time he made the statement, the law did not enable him to do it, but he
6605 feels that the law should be changed.

Q Is that what you said? A That is what I said. I think the writing should be so clear that it should be made immediately plain that persons outside working areas have the right to be checked.

with Mr. Roberts.] That is what I said. He is under the impression that the law does not allow it.

1000 Mr. Bruce Smith: That is what I said. That he is under the impression that Mr. Leach was right
in his view that he (Wyne) had no right in the mine at the time, but he thinks that the law should be
altered so that it should not be necessary for a man to be a working miner at the time he goes in to

make a check (response) to the state of the law, of course, I am not expressing an opinion. Your Honor will see in Rule 80. The persons employed on a case may from time to time appear two of their number, or any two persons, not being opposing counsel, who are practical working matters, to respect the issue, at three was said. . . . As to what that means I do not think I am concerned, just over, to

1991, *See Flower*) The witness says that he has been a practical working man, but he did not happen to be a practical working man at that time, and, therefore, he thinks that, as there is a doubt, at any rate, about the construction of this rule, it could be so well that it should be made clear that a man need not be an actual working man at the time of making the deposition, if he has had the practical experience.

Mr. Bruce Smith.] Mr. Arkison tells me that there was a case at Illinois in which a shuck-weighman was chosen as a clerk-judge. It was contended that he was not a practical man, and it was decided that he was not, that he did not come within the category, and therefore could not be chosen again. [Mr. Moore.] Although he had all the experience, but was not working at the line as a practical man?

1904. *My. Bruch. Anni*] That is it. So that there would seem to be some doubt at least

Q And you think that if there is any doubt it ought to be removed? A Yes.

Q. You think that if a man has the practical knowledge, the mere fact that he is not engaged in practical nursing at the time should not disqualify him from acting as check-weigher? A. Yes, that is my view.

Q. Now, is there any other proof of that kind that you would like to bring before the Court?

is that all that matters

0000 Q Do you wish to say anything about any of the other respondents that you saw some of those names in the district? A Yes. I would like to say something.

in accordance with Hesse-Klein's notes, that I found things on the whole in a very satisfactory condition at Kribbi.

note Q In 1908, this was the only road that I made to Mount Krishna, and the only recommendation I think, that we made in our report was an improvement in the traveling road.

Issue 1: Q. En. Mervyn Dymally? A. Yes.

0312 Q When was the canoe with the missing end P A Along the port in the morning, was that the report referred to down main stream of water heading, and the vessel instead of being kept on one side, was allowed to cross the canal, and the canoe had to walk through water and mud in some places that might easily have been prevented by just a drain on one side. So we just made that recommendation.

Q That was the only fault that you had to deal with the general conclusion of the case? A That was about all, but I wish to say this also, that the management got more word of my being likely to resign than I was offered by any of the women that went anywhere had been made to

was that ordinary and I was relieved by one of the men that great preparation was not made to have everything put right. Instead was all put up, and everything they could think of that was likely to be wrong was put right. It happened in this way: I arranged to visit Mount Kemble on the Monday before Christmas, and was to make the connection with one of my visits. I left

morning, and I had misadvised the men who were to make the contact with me. My men left home early in the morning, assuming to be at the military before morning turn, 7 o'clock, and it rained heavily, and by the time I got to Wallington I was wet through. I had no change of clothing, so I turned back home from Wallington. My private, being alone, anxious, had engaged another man to take back me and, obviously, the men forgot, and to know that I should have had a wet that day.

Q You were two or three hours late? A I was not two or three hours late. I was two weeks late. When they know a day or two before, that is generally sufficient time to get things right.

Q115 Q: You cannot be of your own knowledge, what changes had been made in the case previously to your coming? A: No, I could not say a word of that.

5877. Q Now, is there any other general fact that you wish to bring before the Court? A About where
5878 police?

1676. Q. Yes of a general nature? A. I would like to refer to General

8070 Q Have you the report that you made on Carrizal with you? A Yes.

6060 Q These have been printed, I see? A Yes, printed in the local paper. Of course, I was going to do with this printing of them.

#551. (Extract from newspaper handed to Mr. Bruce Smith)

Q Will you tell us now about the financial state, very fact of importance which you wish to bring before the notice of the Court? A One particular fact is in connection with the part of the same known as Main De

an Miami ship
Q. It might pay to have me take up the gangway over there too? A. [After a short
pause.] Q. The reported speed of a ship for Miami Ship and Boat Builders was 15.5 knots per hour. out of
that 7,500 cubic feet supplies the Miami, and since the working places in Miami Ship only get a regular
of 2,500 cubic feet of air per minute for only one man, boat, and home, giving an average of 100 cubic
feet per man. In the Miami Ship rooms, away there are 5,000 cubic feet per minute. That is all you
wish to mention, is it not? A. That is all.
100-100

1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 26

Wm.—J. Wynn, [C. Bailey, 204.

8721 Q Now, did you read what you state to me about Helmsburgh's? A [Continues previous answer.] And it is a statement of that protest that the qualification is put in the report, that there is no contact with the atmosphere.

8722 Q Well, would you mind telling that one? A No.

8723 Q It is about the same? A No, it was not the same.

8724 Q It belonged to Mr. Lodge, I suppose? A It belongs to the Times.

8725 Q Now, will you put me in the nature of Helmsburgh's? A Yes. At Helmsburgh there was one of the mine, and one of the shaft, and one of the explosion. We spent four days in the examination of that shaft, the shaft is an 18 inches of shaft, and it was very narrow. In the shaft the temperature was rather high, at 40 degrees, when we left the pit below, and 32 degrees in the shaft; so that there was a considerable rise in the shaft as we got into that part of the mine. We found the ventilation was good all round, a large quantity between 100,000 and 400,000 feet of air, was going from the main downcast shaft every minute, and that was very well divided, in my judgment, right through the mine. The smallest measurement for a man and horse in any district was 500 feet. We found gas, explosive gas, in several of the working places—there, I think, in October.

8726 Q Is any quantity? A No, just what we could discover going off from the coal fire. It was a fairly small, especially along the travelling roads. Some of those roads were in a very bad condition in that respect when the explosion was made, and on that account we made a recommendation that there should be two travelling roads, one for the horses, and one for the men.

8727 Q Do you mean a rope road and a travelling road, or two travelling roads apart from the rope road? A Two travelling roads apart from, separate from, all the rope roads. Whether that recommendation has been carried out I do not know. Also, that there should be an attention to the method of entering the Deputer reports in their Daily Report books.

8728 Q What did you find to be the practice? A I do not see any report of gas being found for a long time previous to my inspection.

8729 Q Had you reason to believe that it had been found? A I had reason to believe it could, at that time, be found any day.

8730 Q Is the Helmsburgh Mine? A Yes. The reports were two weeks of a general nature, and nearly all were able for every district and every part of the mine.

8731 Q You corrected? A And, concerning gas, they always ended with the words "no accumulation of gas."

8732 Q Let me show you these a moment. Apart from your inspection, in which you found gas three times, what reason had you for believing that those reports were not correct? A Those being in connection with mine from time to time the year past.

8733 Q You had been told by some from time to time that there was gas there? A Yes.

8734 Q And if that was true, the reports were not correct? A To my judgment they were not.

8735 Q Is that all you have to say about Helmsburgh? A —

8736 Mr. Baileys? Q Have you got that report here? A Yes.

8737 Mr. Baileys? Q Here is a copy of the Helmsburgh report? A Yes.

8738 Q Let me see that. [The report was handed to Mr. Baileys.]

8739 Q That was duly entered in the book at the time, I suppose, as in the other case? A Yes. It might be a little more clearly expressed in the other reports than it is in the military reports, but there is no objection in the main facts.

8740 Mr. Baileys? Q What is what I am asking. There is one official report, and another military report.

8741 Mr. Baileys? Q Is there any difference between those two copies, Mr. Wynn? A I am not sure it is, but possibly it would be made a little clearer in detail in the sense that in the military book but on fact of importance would be altered in any way.

8742 Mr. Baileys? Q It would be a little more in detail perhaps? A A little more in detail as to the qualifications of gas.

8743 Mr. Baileys? Q Is that a true copy of the official report—so that a true copy of what you wrote in the Mine Report? A I am not able to say that, but I am quite prepared to say that I wrote in the military report the opinion that I am now expressing.

8744 Mr. Baileys? Q Did you put into your military report anything about the Deputer's Report Book always saying that there was no gas? A Yes.

8745 Q And did you express your opinion that gas was repeatedly being found there? A No, I did not do that. I simply have to report what I find. I could not say what was being found at other times.

8746 Q But, if you did not report the fact that it had come in your knowledge it of it was gas three times from time to time, how could you say in your report that the Report Book was wrong in saying there was no gas? A I said, "In my opinion, none [afterwards]."

8747 Q Let me have that written statement, and then perhaps I can put out what I want. [The statement was handed to Mr. Baileys.] What did the book read was "No accumulation of gas"? A No accumulation of gas.

8748 Q And you are about the temperature in the "The temperature in the shaft is high, reaching 40 degrees, and the lowest reading of the thermometer was 32 degrees. That is what you referred to just now? A Yes.

8749 Q You say, "We visited some of the shaft workings, and found them being ventilated in great quantities of surface gas." "We found on several working places a little explosive gas going off; but, in every instance, there was a sufficiently strong current of air passing near the face to prevent it becoming, or, at least, not a dangerous quantity."

8750 Mr. Baileys? Then there would be "no accumulation" of course.

8751 Mr. Baileys? Yes, that would be right in that sense.

8752 Q You recommended "That the men be assigned one travelling road, and the horses a separate one, as to travel in and from the workings", that is what you mentioned just now. "All the machinery that we saw was well and securely fenced, but in our opinion the Deputer's Daily Reports in some cases should be amended to show when and where there had any gas, however small the quantity", that is all? A That is all.

8753 Q Well, that is so much for the Helmsburgh Mine—was there anything more you would like to say about it? A No. In that case, also, the under manager protested against our picking in the report the finding of gas.

8754 Q What was his name? A I do not remember.

8734 Q. Did he object to such putting them in, or object to your saying that the Inspector ought to put it in? A. He objected to the name that I had written. He objected to the statement, that we had found guns, here in the report.

8735 Q. Did he say also, I might object at trial, something a matter and not work recording, and I said, in reply, that whatever I found, in regard of this money I was bound to report, but I had made it a rule for me as it was possible by the way I had worked it.

8736 Q. Now is that any statement that you would like to mention? A. No other, not of any—

8737 Q. Importance? A. That was the only place along the whole of the month that I found any evidence yet.

8738 Q. And you took in all the others? A. Well, I took in perhaps some old writings that would be standing or writing places which the men would not be in for the day, but I never took for you when they used those things. I always stayed the safety lamp with me, though, because some of the returns always were along the old writings or passed through them, and in that case, I sometimes found marks in the books, and looked for gas just near it, then.

8739 Q. Did you follow inspectors go into the Hibernian Mine with naked lights, as they had done in other mines? A. No, we naked lights at Hibernian.

8740 Is that about all you wish to say to the Court? A. Yes. I wish to make some recommendations.

8741 Q. What recommendations would you like to make? A. Perhaps you have put them in writing, and you might read them? A. Yes. [Witness handed a paper to Mr. Dixon Smith.]

8742 Q. The matter of annual meeting in the city body of check inspectors and managers— [Interposed.]

8743 [Mr. Dixon.] That is the one he spoke of.

8744 Mr. Dixon said? Q. Also, as to compelling check inspectors to be a member of the Union. That is included in the one you have made? A. No, that is simply a note of mine. I want say, in connection with that that it is my opinion—in it, he speaks what it may be—that the officers of the Union do not want check officers outside their own members, otherwise they would not have the provision in the Rules for every check inspector to be a member of the Union, and that is the reason of that note.

8745 Q. That is a rule of the Union itself? A. Yes.

8746 Q. But you think that a check inspector ought not to be necessarily a member of the Union.

A. I do.

8747 Q. But if the Union have the choosing of the check inspectors, and if they do not care for anybody to be appointed who is not a member of their Union, do you think they would ever choose anybody outside?

A. Well, there is the fact that they have chosen me, and I am not a member of the Union.

8748 Q. Well, then, they have broken the rule in your case? A. No for as I say, as the rule has been made since I took the office, and when I was elected, after holding it twelve months, and I received satisfaction that I was supported by the miners, I also received a copy of the rules of the association, and in these rules I found out that I was not eligible for the position, according to these rules, because I was not a member of the association.

8749 Q. Having stated you did they call upon you to act? A. They never said anything to me about it.

8750 Q. Not afterwards? A. Not afterwards.

8751 Q. So that you have never acted since that rule approved? A. Oh, yes, I have made two inspections in the last nine months I made two inspections.

8752 Q. Well, then, the members of the rule did not prevent them from electing men outside the Union? A. No.

8753 Q. Your second proposed amendment is then "In giving check inspectors power to prosecute the management for any breach of the law, unless notified within three days." You propose that? A. I do.

8754 Q. That the check inspectors should have the power to prosecute? A. Yes.

8755 Q. About that I would like to ask you this question: you have heard it said that members of the Union hesitate to act as check inspectors for fear they should incur the displeasure of the management?

A. Yes, I have heard that.

8756 Q. Do you believe that to be the case? A. I do.

8757 Q. Do you not think that they would equally, as to a greater extent, object to be called upon to prosecute the management? A. Object to it?

A. Yes. A. Certainly not, where there is good reason for them to prosecute.

8758 Q. Well, have not they good reason for requiring what they see in their check inspectors?

A. Naturally, that is why they should have the power.

8759 Q. Apply yourself to the question which I want to put before you. You say they hesitate at present to report what they find because they do not wish to incur the displeasure of the management by prosecuting? A. Yes.

8760 Q. Would not they be equally likely to incur the displeasure of the management by prosecuting?

A. Most certainly they would.

8761 Q. How do you propose to get over it? A. But if they had a man outside in that position— [Interposed.]

8762 Q. You are suggesting a rule in which they choose a man outside to make the inspection, and give him power to prosecute? A. Yes.

8763 Q. What is to prevent them at the present time from keeping any finding they find under the notice of the Department, as the Inspector? A. There is nothing that I know of.

8764 Q. Why do you think they do not? A. What is the use of doing it?

8765 Q. Why? A. Have not you had the case I have given you of Corbett, the Government Inspector there?

8766 Q. But that is only a statement made by another man to you of what the Inspector said, and you have never listed it by going to the Inspector or writing to him? A. No, certainly. I take it for granted all the time.

8767 Q. How do you know that what that man told you about the Inspector is true? A. I have no reason to believe that he would write me that letter unless it was true. You have to take this fact into consideration, that the man went with the Inspector.

8768 Q. He was not there at an extraordinary thing for the Inspector to admit that he remembered was wrong? A. No, not when he was in the way of performing a duty that is obnoxious to him.

8769 Q. Do you not think it would have been a faulting in him given this Inspector a chance to say whether he said that? A. If that had been a part of my duty I should have known more about it.

8770.

Witness—J. Wynn, 21 January, 1909

8191 Q Would it not have been a fair thing—it would, only have sent a trespassing stranger—to give him a chance of submitting or denying the statement concerning him, which was made by somebody else? A It might have been done.

8192 Q It was not done by you? A It was not done by me.

8193 Q And you were the friend that was affected by this statement? A Yes.

8194 Q You come into Court here to tell us that, according to information received by you, the Inspector admitted his competency to be wrong? A That is correct.

8195 Q Your third suggestion is to give check-inspectors power to inspect the place, in order that they may see the method of ventilation, and the position of doors, or crossings, stream surveys, &c.? A Yes.

8196 Q You might explain to the Court why you made that suggestion? A I make the suggestion because, if a man is competent to do the work of a check-inspector, he will, from his first visit, be actively unacquainted to the workings of the Colliery, and will not know what system of ventilation is in existence, and he has no inspection. But if he had the chance, and indicated the examination of the Colliery plan, he would be able to find out, by that Colliery plan, the system of ventilation is the same.

8197 Q In your opinion, it would enable the check-inspectors to do their work more completely? A Yes.

8198 Q Especially where they have not been acquainted with the work before? A Yes; that is the object of it.

8199 Q Your fourth suggestion is to compel the Government Inspector to leave a copy of his report at each colliery on completion of examination—the same to be sent on the land by the check-inspector? A Yes.

8200 Q You want the check-inspectors to have an opportunity of seeing the Government Inspector's reports whenever they visit a mine? A Yes, that is on a par with the presentation of the Manager. On the one side, if there is a breach of rule, the managers have the power to present the mine for leaving there, whereas the rules are for the safety of the men generally, and, therefore, if they see breaches by the managers, then the other side should have the right of punishing heavily those who break them. Then, in this case that you are now referring to, what was that?

8201 Q Compelling the Government Inspector to leave a copy of his report at each colliery on completion of his examination—the same to be sent on demand by the check-inspectors? A My reason for that is that at present the check-inspectors are compelled to leave a report of their inspection. The Government Inspector is supposed to look after the safety of the men as well as the check-inspectors, and there is no reason that I can see why he should be exempt from leaving a copy of what he finds there for the check-inspectors to see. You see I am not providing that this shall be open to any of the miners, nor has the proposition to be put in the hands of the miners, but simply to some person who would not be at advantage of his position, but would see that right was done in all parties, and I think it is only right that the Government Inspector should leave a report. We should be able to see there how far he worked during his duty.

8202 Q You said just now that, whilst seeking to put the Inspector power to prosecute the management, you also sought to give the management power to prosecute the men? A They have it. It is a one-sided and unfair law.

8203 Q Your fifth suggestion is this—that the return surveys should be, as far as possible, through solid rock, and that rock headings should be utilized? A As far as possible.

8204 Q Yes, as far as possible. And you have an alternative "F.Y., ending off"—would do you mean by that? A The advantage of stream surveys through solid rock instead of through the old workings is that it will keep the current in one place.

8205 Q Yes, I understood that? A And increase the velocity. The "V" is the velocity, you see.

8206 Q "F.Y."? A You would have a better chance of sealing off the old workings.

8207 Q Now, if that a proposal of yours, that all the old workings should be sealed off on all sides? A That would depend, I would not say all of them.

8208 Q I want to know your opinion. Would you seal them off all round or only on the outside side? A It would depend upon the plan. You see you could not decide a question like that right very far. There would be some places, I daresay, where it would be a much better system to keep these open, and allow all the fuel gas and gases to have a chance of coming out.

8209 Q You are not in favour of sealing them all altogether? A Not altogether.

8210 Q You know that some people have suggested that, do you not? A Yes.

8211 Q Your sixth suggestion is "Increase the minimum quantity of air by 50 feet", that is to say, you would increase it from 120 to 170 feet per man, horse and boy? A That is it.

8212 Q And allowing the measurements in any part of the mine? A No.

8213 Q What do you mean then? A The system of measurements adapted now is to measure in the main road under air, and then divide by the number of men and horses that the aggregate supply goes to. The rule is to measure in the centre of the roadway as you can get it. Say you have a 6-foot square, it would be 36 square feet area, and the measurement would be in the center of that 6-foot square, and my experience is that you get a stronger current there than you do at some other parts of the mine area.

8214 Q When you require the mean amount to be made in any part of the air? A And I assume that, in a good many cases, there would be 36 per cent. less air going in the mine than is registered by the machine.

8215 Q Where would the 23 per cent. go, in your opinion? A It would be by having the strongest part in the machine. If you held up the anemometer near the top you can see you would find that it would not register such a large amount as it would in the center. That is what I mean.

8216 Q You mean that, if there were three officials from the mine taking, one straight ahead and one on each side of the middle one, the middle one would get more than the side ones? A Yes, but I did not mean that.

8217 Q That would be the effect of what you say? A No, I mean that if you take a measurement you should have the right to make it in any place—bottom, top, or middle.

8218 Q And you require the minimum quantity of air at all places? A The minimum of all these places to be 170 feet wherever gas is known to be.

8878. Q So that the engine would require to be some three times as big?—A Yes.

8879. Q Something like 180?—A Yes.

8880. Mr. Wynn Smith? Q Do you not agree that, roughly, I mean the maximum storage to be 170

feet, the measurement at the side would be 110—correct or incorrect?—A Not that I know of.

8881 Q And suppose he went to the side and found that the measurement was 100—would he do anything or not?—A Yes, he would say, "Oh, well, let me see in the side and see if it will hold it."—A They said large.

8882 Q Under what circumstances, or rule, or regulation?—A Yes, I do not know that there is anything to hinder that now.

8883 Q You say the maximum should be arranged all over the open air through which the air goes?—A Why do you ask for 180 maximum instead of 170, as at the present time?—A Because I consider 180 cubic feet is not sufficient where gas is known.

8884 Q I suppose you will allow that that depends upon how much a man or a horse gets, does it not?—A I would not admit that whatever the man or the horse absorbed would make any difference to the quantity.

8885 Q How far any idea how much a man does absorb?—A The question is that of removing the danger caused by the gas.

8886 Q You won't not regulate it by what a man or a horse requires for respiration, but by the necessity for a greater space to carry off gas?—A That is the idea.

8887 Q And would you apply that indiscriminately to all men, whether they have gas or not?—A No, you see I have put that in.

8888 Q Then you are of the opinion that a horse gas has not been found there is no necessity for any increase on the present maximum of 180 cubic feet?—A I think it is quite sufficient.

8889 Q And from your chief assistant you say there is only one more in the district in which you would require 120 cubic feet—I mean, if you judge from your own inspection?—A Yes, from my own inspection.

8890 Q Would you go on one inspection? Do you not think a sufficient test?—A I do not, a man is always at a disadvantage on his first visit.

8891 Q Then you require to have a judgment in testing whether a man is gassy or not from more than one visit?—A Yes, but in every place besides Holmsburgh the flue light was used, so that I would not think of testing for gas in a place where they were using the flue light.

[The Commission then adjourned for luncheon.]

REOPENING

[On resuming at 2 o'clock Mr. W. R. Peck attended to take shorthand notes of the evidence and proceedings.]

JOHN WYNN, previously sworn, was further examined as under:—

8892. Mr. Wynn Smith? Q You say that there should be an amendment of the law with a view of preventing what there has been making an examination of a man with the same safety lamp, which they are in using the shot, and you have on your examination, or examination, the words "A hole in the glass?"

What do you mean by that?—A The most common way of being a shot is in a mine where gas is known to start in by a wire being by a safety lamp. You can either put the wire through the glass of the lamp, or through a hole hole which is cut in the glass.

8893 Q Do you say that the hole is cut through the glass?—A Yes, and I think that the examination ought not to be made with that lamp, because it might be that the shot-fire would not come up the hole, and there is a danger in that case of the flame of the lamp getting the gas.

8894 Q Is that hole made artificially, or is it provided in the lamp?—A It is provided in the lamp, for the purpose I have mentioned.

8895 Q It is provided in some of the lamps?—A Yes.

8896 Q And you say that lamps of that description are not safe for the purpose of making an inspection?—A No, because they may be the means of getting gas.

8897 Q You say that there should be "Cut through every 30 yards, or as often as before 30 yards. A mistake in removing it from the law. What do you mean by that?—A Before the last amendment of the law there was a provision that cut-throughs should be 30 yards apart. When I went to make my first inspection of the Kew Colliery I thought that this provision should be altered, but found out that it had been revised from the Act of Parliament, and that the danger of a man could carry the air by means of a lamp for any distance he liked. I consider that it is dangerous to carry the air by far by means of a lamp.

8898 Q Up to what length do they carry the air now without cut-throughs?—A I found, on my first inspection of the Mount Kew Mine, places between 60 and 70 yards without being provided by means of a bracket.

8899 Q What is the longest length you have known in the Holmsburgh mine?—A I do not think there is anything like that distance without cut-throughs.

8900 Q Are you aware that in some cases there are distances of several hundred yards without cut-throughs?—A I am not aware of it. I have seen in other collieries places where the cut-throughs have been 40 or 50 yards apart.

8901 Q Do you know anything of the English practice with regard to the size of the pillars?—A The pillars would be about 10 yards square—that is, unless they are new a shaft.

8902 Q You have a note here of £100—what does that mean?—A It refers to a suggestion I was going to make. I thought that the Government might offer a reward of £100 to anybody who could improve on the present way of testing or in mines. At present it is almost impossible to register 100 feet of air per minute, and, therefore, it is impossible to carry out the Act by measuring the air in the working-place and you have to take the aggregate quantity of air there.

8903 Q You say that you would also suggest as being important, that there should be more "self-help"?

What do you mean by that?—A By "self-help" I mean help from the Miners' Union. I mean that the miners should help themselves.

8904 Q You do not believe in their looking to Government and Parliament for everything?—A I do not think they would look to the Government to do everything for them.

8905 Q You say that "Competent check-inspectors should be selected as far as possible"?—A I mean that the miners ought to select competent check-inspectors.

Witness: J. W. M. Morrissey, 1895.

8813 Q You also suggest that "More frequent check inspections should be made"—you say "once in every three months." Do you know how often check-inspection are made now? A I hold the office of check-inspector for twenty-two months, and during that time I made ten inspections. There are nine divisions in the district belonging to the C. & D. R. R.

8814 Q Which means that one inspection is made, on the one to every ten months? A Once in every twenty-two months. It takes a full six months to inspect in a division where you only have an inch of track.

8815 Q Were you not asked to make more frequent? A I needed the inspections that I could make. 8816 Q You suggest that "a permanent check-inspector ought to be appointed for the Division and the Western District." A I have suggested that I make. I propose the appointment of a check-inspector by the Union. It is not possible to have one appointed for Division alone, the appointment ought to be made in combination with the district.

8817 Q You say that the probable cost would be \$175, which would be 10¢ per man. That would make up the salary of a person and check-inspector for twelve months? A Yes, for twelve months.

8818 Q To say that? The cost of check inspection during your term of office was \$20—20¢ per month, or 80¢ each month? A Yes.

8819 Q That is nearly the cost in wages? A Yes.

8820 Q You say that you think that a regular check-inspector would make the management keep things over the bar? A Yes.

8821 Q I think there is something which you need, you wanted to say about Inspectors? A I simply wanted to say what I had a just and what check-inspection are of great importance, because the Government Inspectors do not appear to be very satisfactory.

8822 Q You have found some spaces as to the way in which Government Inspectors do their work? A I leave of the way, because when I was working at the Pullman a Government Inspector came there and took the management of the car at the station, the constitution of the foreman, and the necessary extent of the return car, and left the Delivery without going into the workings of it all.

8823 Q Have you any suggestion to make with regard to the work of the Government Inspectors—do you think they do their work properly? A I have no suggestion to make as to that, and I think that you should go a power to the check-inspector to see that the Government Inspectors do their work properly.

8824 Q You wanted to say something about the Hibernian case? A No.

8825 Q Is that all you wish to say? A Yes, that is all I wish to say.

Mr. JOHN MORRISON was sworn and examined as under—
Re-examination as to Mr. Wade

8826 Q What is your name? A John Morrison.

8827 Q What are you? A At present I am a deputy at the Mount Kisco Colliery.

8828 Q You were called on as a witness at the Cassatt Inquiry relating to that disaster? A Yes.

8829 Q I want to ask you as to two things which you say have occurred after the disaster. Now, as a matter of fact, you had two men at the disaster? A Yes.

8830 Q And you were not asked any questions about them in your examination at the inquest? A No.

8831 Q I want to ask you about the other boy. Do you know where he was found? A He was found in the 4th Level, looking over, near the main tunnel.

8832 Q Mr. Wade? Q What was his name? A Harry.

8833 Q Mr. Wade? Q He was a black, was he not? A No, a chigger.

8834 Q Was he a small boy? A He was 17 years of age.

8835 Q I suppose you saw his body when he was taken home? A Yes.

8836 Q Did you see the body before it was washed? A No, I did not see the body until after it was washed.

8837 Q Did you notice the face and the arms? A Yes.

8838 Q Were there any marks on the body? A On the back—the hands the skin was round, but it was not broken.

8839 Q Where the marks on both hands? A Yes.

8840 Q On the back or on the front of the hands? A On the back of the hand.

8841 Q To what extent was the skin raised—2 or 3 inches? A It was just slightly raised—you could see that the skin had been slightly burned and raised up.

8842 Q What was the extent of the burning? A From the knuckles down to the wrist.

8843 Q Was the skin as big as half a crown? A It was the width of the wrist.

8844 Q Would it be about 2 inches long? A It would be about 2½ inches long.

8845 Q Where the marks on both wrists? A Yes.

8846 Q Are these the only marks which you saw on the hands and the arms? A Yes.

8847 Q What about the face? A The skin was all the same.

8848 Q How much? A Just a little.

8849 Q Can you describe it? Was the place as large as a supine, a shilling or half a crown? A It was a long strip about half an inch broad, I should think it would be from 1½ inch to 2 inches long.

8850 Q Was the skin hanging, or was the skin gone? A The skin was gone.

8851 Q Did you see any on the legs, legs, etc.? A I saw marks on the side of each chest; the skin was raised the same sort was on the back of the hand.

8852 Q What did you notice about the face? A All round about the face there were little pieces pointed out—the place was about the size of a threepenny piece.

8853 Q What was pointed out? A Pieces of skin.

8854 Q Were those marks on the face or on the hands when the boy went to work on the morning? A No.

8855 Q With regard to the boy's head. Did you notice anything about that? A He had had his hair cut about the day before, I did not notice anything wrong about it.

8856 Q Did you notice if the marks were raised? A No.

8857 Q Would his work be so No. I mean tunnel rope road? A Just on the opening of the 4th Level.

1894. Q How far was his body from where Dungen's body was found? A It would be about 50 yards or so—I cannot exactly say.
1897. Q On the opposite side? A Dungen was found on the left left. I forgot to say that there was a mark on my arm's chest as though something had struck. I cannot say though I had been thrown against something.
1899. Q Was the mark on the chest bone? A Yes I think so.
1900. Q Was there any other injury by way of broken bone? A Nothing that I noticed.
1904. Q When going up towards Arker's body did you come across a man named Jones? A Yes.
1905. Q Was he dead? A Yes, he was lying on the back of a step 7 or 8 yards from the fence.
1906. Q What was the number of his hand? A No 51.
1907. Q Would he be near Arker's place? A Near to the main tunnel.
1908. Q Between the main heading and Arker's place? A Yes.
1909. Q What was Arker's name? A No 30.
1914. Q He was next to him? A Yes. He was in a hard seat to Arker's place, but that hard seat had not been pulled through with a cut through.
1915. Q Did you examine Jones? A There seemed to be nothing wrong with him. He looked as if he had only been down.
1916. Q Did you examine his back afterwards? A No.
1917. Q Do you remember finding a shirt near Arker's place? A Yes.
1918. Q On what day? A On the day that Mr. Thomas was there—the 26th of August.
1919. Q Where did you find it? A Twelve or 15 yards inside of Tom's head.
1920. Q What do you mean by inside? A Between Arker's place and Tom's head.
1921. Q What is the number of Tom's hand? A No 38.
1922. Q Do you know whom the shirt belonged to? A It belonged to Tom.
1923. Q Was it an outer shirt? A Yes.
1924. Q Do you know where he usually kept it? A It usually lay at the head.
1927. Q At the top of his head? A Yes. Tom was found between his head and Arker's place—about 15 yards from Tom's head.
1928. Q Had the shirt apparently been moved in a direction from the main tunnel towards Arker's place? A Yes.
1927. Q Did you not see any other things in Arker's place? A We saw a pocketful sticking in the prop in Jones' place.
1928. Q In what position was it? A It was stuck in the prop about an inch deep.
1929. Q On which side of the prop would that be? A On the side next to Arker's place.
1930. Q Would it be between Arker's and No. 1 main rope road or over the side of Arker's place? A On the other side.
1931. Q Do you know anything about the ownership of it? A No, I know nothing about the ownership of it. The knife was half closed when we found it, and the blade was bent.
1932. Mr. Street Smith? Q Was the blade bent afterwards? A Yes.
1933. Mr. Wade? Q Suppose the knife had been lying there by itself? A It was the same as if it had been lying from Arker's place towards the next place.
1934. Q You saw a "C" marked on the main rope road close to Morris' cut-through. Was a door there at a point before the disaster? A Yes.
1935. Q Did that door have the effect of turning the air from the main rope road through a cut-through, out by Morris' place and up the back heading? A Yes.
1936. Q Did you find that door afterwards? A Yes.
1937. Mr. Wade? Q Was that a wooden door? A No, a canvas door.
1938. Mr. Wade? Q Where was it lying? A The door was lying at the turn—corner.
1939. Q Can you describe the place? A I will describe it. [Referring to the plan.] The door was fixed on the outside side of the cut-through leading to Fred's and Tom's head. It was exactly opposite the head.
1940. Q Then it had evidently been forced open? A Yes.
1941. Mr. Wade? Q It had been here for a distance of 4 or 5 yards? A Some 4 or 5 yards up.
1942. Mr. Wade? Q Is not the cut-through actually opposite Morris' working place, between the front and back heading—No. 1? A Yes.
1943. Q Before the disaster, was there any a road there? A Yes.
1944. Q On Morris' side? A On the cut-through between the two headings on the side near Morris' place.
1945. Q Was the canvas laid from that particular across across the cut-through to Morris' place? A Yes.
1946. Q Was the canvas there? A Yes, on the side of the cut-through nearest to Morris' working place.
1947. Q That was the side running up to the back heading? A It was a canvas door, and it was across the mouth of the cut-through.
1948. Q On the back heading, not on the front heading? A Yes.
1949. Q From that particular across across that cut-through, the canvas was carried over Morris' working place? A Yes.
1950. Mr. Street Smith? Q The other corner? A Yes.
1951. Mr. Wade? Q The effect of that would be that you had the air going up near No. 1, in the cut-through, and out by Morris' place? A Yes.
1952. Q What I mean is this. Did the air come from that cut-through, up to the back heading, and did the canvas at Morris' place take the air round it, out again, and up to the face of the back heading? A Yes.
1953. Q Now, the canvas which was across the cut-through, opposite Morris' place—did you find that after the disaster? A Yes, it was lying up against the corner.
1954. Q What corner? A Corner between Morris' place and the back heading.
1955. Q Do you mean the corner of Morris' place? A Yes.
1956. Q How had it moved? A It had moved to the junction of the main tunnel.
1957. Mr. Wade? Q You mean at the north-east corner of the intersection of the heading that Morris was driving and the back heading? A Yes.

[Witness—J. Harrison, 27 January, 1934.]

- Q348. Mr. Wade? Q You say there were found some of the canvas Movers against a corner? A Yes, and some canvas was lying on the ground.
- Q349 Q A little further away did you see some more canvas, scraps from Movers' working-places? A Yes.
- Q350 Q In the back heading? A Yes.
- Q351 Q I mean that there was some canvas in bits of Movers' working-places? A Yes.
- Q352 Q How much was there? A When we took Movers' body away we took some of the canvas and put it over the top of the body. There was a long piece of canvas lying there, it was against the skid on the right side of Movers' place.
- Q353 Q Where? A On the left-hand skid going over Movers' place.
- Q354 Q In what direction had it gone? A Inward.
- Q355 Q How far was it from where it had been placed before? A About 5 yards, I think.
- Q356 Q You know the canvas that went up to Movers' place to take the fire on there? A The canvas was all down in Movers' place.
- Q357 Mr. Harrison? Q Is not that the same canvas? A Yes, the same canvas.
- Q358 Mr. Wade? Q Do you mean the same canvas that you were talking of last? A Yes, just the same piece.
- Q359 Mr. Wade? Q Then you mean that the canvas which took the fire up to Movers' place had been blown away and had also been moved sideways for several feet? A Yes. The canvas against the back heading ran down into the back heading.
- Q360 Q The fire was over the same in such case—why? A Yes.
- Q361 Q Or a corner or a fire which was found 130 yards away from No 1 rope road? A Yes.
- Q362 Q Did you find a piece on the remains of the fire? A Nothing did.
- Q363 Q What did you find—yes, where above the where were? A We looked against some canvas there.
- Q364 Q Were those some pieces of canvas which had been burnt? A Yes, and a piece was found there.
- Q365 Q What was that piece now? A Harrison has it.
- Q366 Q Do you know whether that piece was used by the men for their coats, or for sitting down in? A Not to my knowledge.
- Q367 Q The piece was just off the road, was it not? A Yes, just off the road.
- Q368 Q Was there anything else lying about there? A Some bits of newspaper.
- Q369 Q Yes, is that right? A No, the paper was not burnt.
- Q370 Q With regard to the 4th left skid, were there any down on that road, before the disaster? A Yes, there were five canvas down on it.
- Q371 Q Between what points? A Between Stafford's going head and the entrance to No 1 rope road.
- Q372 Q Were there any canvas down on No 1 rope road? A Yes, two. There was a corner down, and the knot ran through was cut down, and there was another corner down after that.
- Q373 Q How far was that from the main No 1 level, and the first head on the 4th left? A About 30 yards.
- Q374 Q How far was it to the travelling road? A About 10 yards.
- Q375 Q I am speaking of the 4th left road? A Those were five on each road.
- Q376 Q Between No 1 level and Stafford's going head? A Yes.
- Q377 Q Are the remains of those down lying about there now? A Some of them have been put up and some of them are down.
- Q378 Q There was canvas timber lying about, scraps of the 4th left rope road? A Yes.
- Q379 Q It was scattered about? A Yes, so far as the 4th Right.
- Q380 Q Had that timber been started? A Yes, the timber had been started.
- Q381 Q In what position? A In big sticks.
- Q382 Q Where? A Just past the 4th Right on the main level.
- Q383 Q Where was it found? A It was spread all about.
- Q384 Q In what direction? A Inwards, where it had been stacked.
- Q385 Mr. Brown Smith? Q Where did you say that was before? A On the road as you go by the 4th Right.
- Q386 Mr. Wade? Q On the main rope road? A By the side of the rope road. The rope road finishes on the 4th Right.
- Q387 Q Had there been any timber lying near the 4th Left before the disaster? A None that I know of. You might get a single bit of jacks there. There might be timber on the 4th Left, but no quantity, but scraps of the 4th Right a large quantity could be started.
- Q388 Q Do you remember the building moved the door in the travelling road scraps of the 4th Right? A Yes.
- Q389 Q Did you notice how that door had been blown? A Yes, the door was knocked off the stone-work.
- Q390 Q In what direction? A Inwards.
- Q391 Q Did you notice the stone-work of that came down—on the side next to the 4th Right? A There was very little knocked off.
- Q392 Q Which side had the door been knocked off? A The one on the left-hand side going in.
- Q393 Q How far was that stone-work from the 4th Right? A There is 40 yards.
- Q394 Q Did the force seem to have struck the 4th right the rope road? A Yes.
- Q395 Q Can you say whether, if the force had come out of the 4th Right, and turned the corner, it would strike the left side? A Yes, I think it did so.
- Q396 Mr. Brown? If you look out of the 4th Right outbye, from the goaf, the westernmost corner would strike the road.
- Q397 Mr. Wade? Q You told us about a place where a fire was near one of the beds of No 1 main level. Did you notice whether there was any fall over those beds? A Yes.
- Q398 Q On which side would the fire be, between the fall and No 1 main level? A The fall was between the 4th left travelling road and where the fire was.
- Q399 Q Suppose you were going from No 1 main level to the fire, would you find the fall where you passed the fire, or before you got to it? A After you passed the fire.
- Q400 Q Had that fall taken place before the disaster? A Yes.

9006. Q If you wanted to walk from the place where the fire was to the 4th left travelling track, you would be blocked by the fire? A Yes.
9007. Q If you wanted to walk to the gang board, you would be blocked by the fall on that side? A Yes.
9008. Q Between the 4th left and the place where Harvey body was found—what was the floor there? Was it ordinary dust or coal dust—dirt or is it, standard or coal dust? A There was a little more dirt and coal-dust too.
9009. Q As proved there is a good deal of stone there. Has it been put there since the explosion? A Yes there is some stuff which has been thrown about there.
9010. Q How about the Harvey body? Did you see it thrown there after the explosion? A There was stone at the time.
9011. Q Mr. Wade? Q When do you mean by "at the time"? Do you mean by the fire? A Yes, I think it was stuff thrown out of the sides. The stuff on the sides is thrown up and down—all over the place.
9012. Q Have you had experience of a small fall of the roof—I mean ordinary fall? A Yes.
9013. Q What is the roof at Keweenaw? A Oh, it varies.
9014. Q What is it as a rule? A In some places it is stone and shale, and in other places it is a slate.
9015. Q How do you know the time at which there is a fall from the roof—I mean when it takes place? A If there was a fall on one of the sides, I would know before I went there that the fall had taken place, because the white dust gets on the walls and shows itself.
9016. Q You don't see it after the fall? A Yes.

Mr. JOHN WYNN was recalled, and examined as under—

Cross-examined by Mr. Troughton—

9017. Q Did you notice whether the accelerometer used at the Canadian Colliery was a new one? A Do you mean the one I was using?
9018. Q Yes, the one the Manager was using? A I gave him it. He brought it up to check mine.
9019. Q When the under-manager protested against the measurement of the gas being entered, did he give any reason? A Yes, on account of the instrument having stopped when he started the measurement.
9020. Q Had you not taken the measurement? A Yes.
9021. Q Was he not satisfied with it then? A He was made any complaint until he read the report.
9022. Q And how long after the report had been written was it that he read it? A Immediately after I had done it.
9023. Q Did you alter it? A No.
9024. Q Did you strike any of it out? A No.
9025. Q Did you ask, when you were at Hibernia, how it was that there was no entry in the book, of gas having been found? A Yes.
9026. Q Who appeared you? A The under-manager.
9027. Q What did he say? A Oh, he read the figures made there reports as they found the mine.
9028. Q Did you point out to him that you had reason to believe that gas could be found there any day? A I did not.
9029. Q And, in addition to the under-manager protesting against your report of gas, did he give any reason for that protest? A Only on account of the condition of the quantity found. He said it was of a useless nature.
9030. Q Did he say why he did not want a telling amount of gas reported? A He did not.
9031. Q You told us that the officers of the Union did not want check-measurements reported from outside the Union? A I only give an opinion on that.
9032. Q Have you anything to base that assertion on? A I have the standing fact that they had only ten inspectors in twenty-six months.
9033. Q You were the inspectors, and were not in the Union, was there any fact which would prevent you in saying that the officers do not want to employ persons outside the Union? A I mean only the officers have that rule.
9034. Q Do you not see yourself that the Union could more safely trust a man who was a member of their own body than an outsider, to make a check-measurement? A I do not see it. There have been opponents to me in elections for that post.
9035. Q Was the members of the Union any reason for not making a true report? A I do not hear of that at all.
9036. Q Would they have any reason? A They might have.
9037. Q What would be their reason? A It might be the danger of being punished.
9038. Q Do you know what it is put into danger? A I know it is the fact of my making an entry about gas is quite enough to show me what would happen if others did it.
9039. Q Do you know that one of the reasons given for choosing you, as being outside the Union, would be that you would not be afraid to report if you discovered things? A I believe that was the chief reason for my appointment.
9040. Q You told us that on one occasion Mr. Russell did certain things. Is that the same Inspector who, at 664 Hall, only came in and took the measurements, and went out again? A No.
9041. Q Who was it? A That was a long time ago. It was when I was check-measurements outside.
9042. Q Who was it? A The same man Lewis.
9043. Q Do he in the district now? A He is dead I believe.
9044. Q After Mr. Russell had made that statement, had you any reason to doubt his integrity? A What statement?
9045. Q About the accelerometer being wrong? A Most decidedly.
9046. Q Have you any reason besides that you mentioned? A The only other reason is because of the faulty place I found in the other inspections, which ought not to exist if the inspectors had done the work satisfactorily.
9047. Q What do you mean? A The case when I pointed out that there was a break in the law and on other respects.

- Q149 Q Can you tell me of any case where a branch of the law came to his notice, and he did not let it be a branch of the law? (Interposed)
- Q150 Q I mean a case where a branch of the law was brought under his notice, and he did not then proceed? A The only branch of the law is the Government case—a case of short restrictions.
- Q151 Q With the exception of the Government case, have you any reason for doubting Mr. Hume's integrity? A Yes, because of the case of Kears—a partial stoppage of the movement, and he was very busy in putting it right. There was also the existence of black dump there.
- Q152 Q Do you know whether Mr. Hume saw those dumps? A I do not know, but I think he would have seen them.
- Q153 Q Do you know officially where he had been at Kears previously? A I do not know.
- Q154 Q Have you any other reason for saying he was not a man of integrity? A There is the Helmsburgh case. If proper reports had been taken, there would have been statements made of the frequency of gas flow.
- Q155 Q Is there anything else besides that? A No.
- Q156 Q Coming to the Mount Kanabla Mine,—is there anything there to show that the Government Inspectors neglected their duty? A I cannot think of anything.
- Q157 Q With regard to the movement of the air in a mine—is it a fact that the only reliable guide is to the sound of air in the working places or to take the movement of the air in those places? A That is the only reliable guide.
- Q158 Q Would you be in favour of recommending that the air should be regularly taken in the main working places? A I do not know.
- Q159 Q Why? A Because it is impossible.
- Q160 Q Why? A The anemometer will not give any registration.
- Q161 Q Can you give me the least registration it will take? A I never made any test, but in a mine where you are working not less than 300 feet per minute. I should say that it would be impossible to get a registration of 100 feet in the working places.
- Q162 Q Where would you suggest that such measurements of air should be taken? A I do not think that anything better can be suggested than what you have at present, with the anemometers you have. They were made use to measure the air as over the working face as I could get, but I found that that was not the rule with the Government Inspectors. I often went to 100 yards nearer the face to take any measurements than the Inspector did.
- Q163 Q Has the management of a mine ever objected to your taking measurements with the air? A No.
- Q164 Q You would not think of testing for gas where there lights are used? A Yes, I said that.
- Q165 Q Is Kanabla there lights were used? A Yes.
- Q166 Q You did not test for gas? A I did not in the working places.
- Q167 Q Do that the inspection of mine of Kanabla, as far as the working places were concerned, was not reliable in relation to gas? A If there had been gas, the flame light would have flamed it before I went there.
- Q168 Q With regard to the inspection of the mines—you only went a few yards into them? A Yes.
- Q169 Q Now, did you go into the working places, or did you pass some of them over? A I went into every one.
- Q170 Q You saw all the workings whilst you were there? A Yes.
- Q171 Q What were the preparations which had been made to put things in good order? A I found all that.
- Q172 Q Now, with regard to your suggestion as to doing a shot, would you say that the practice of opening safety lamps to light a flame with was a dangerous practice? A Certainly it would be, in the presence of gas.
- Q173 Q It is what there is the Kanabla Mine had, since the disaster, made it a practice to open a safety lamp to light a flame, would you say that he was a competent man? A I would say that it was a dangerous practice.
- Q174 Q Would he be competent? A He might have in other method of lighting a flame.
- Q175 Q Would he be a competent man to extend work the work? A He should not be connected with it, and he should refuse to do it.
- Q176 Q With regard to the recommendation, "That eye through should be 30 or 32 yards apart," do you think that there are dangers in such working? A No.
- Q177 Q Now, is what say it is that the air must be taken more self help? A I think there ought to be more frequent inspections. The inspectors do not seem of much value as they are made now.
- Q178 Q You said that the Government ought not to do a lot of things for them? A I mean a relation to carrying on the check inspection. The miners should appoint competent men, and have more inspectors made, and these inspectors should be by independent men who can make reports without fear of the consequences.
- Q179 Q Now I will take you through some of the general recommendations. No. 1 is—"Miners, wear masks, goggles, and that there is kind of ventilation of machinery by gasolene, and to have had the same practical arrangements before being eligible for prospective payment." Do you approve of that? A I do not see that there is any end of the what does a being a certified man. If he has any knowledge of the work of all that ought to be sufficient without knowing theory.
- Q180 Q Who is going to decide whether he has that knowledge? A The men who put him there ought to know that.
- Q181 Q Does that not mean that the Manager may appoint a man who may be wholly incompetent, then the rule of Kanabla, for instance, where, once the disaster, a man has been firing shots with a safety light? A Of course, there is a possibility of the management's appointing an incompetent man.
- Q182 Q And would not the effect be to endanger the safety of the whole mine? A Yes.
- Q183 Q What objections you have to the man carrying a certificate? A I have no objections.
- Q184 Q Should they be restricted? A Well I think it might be better.
- Q185 Q Are recommendations No. 2 and 3? Inspectors to be armed with absolute power to order the use of safety lamps? In your opinion should the Government Inspectors have the absolute power of ordering these lamps to be used or a man if they think it suitable? A Yes, I think so.

1000 Q Recommendation No 23— "Instruction by, for and personal and done substituted?" Here I had my experience of where a man has been substituted to know the man has been defective? Here I, I cannot speak as to that. All I can say is that I have taken the letter action of substitution, because it is not subject to atmospheric influence like a furnace.

1001 Q I will pass on to No 24—"Monthly examinations and reports by inspectors and District Inspector for the hydrocarbon class." Do you know anything of the watering of coal mines? A Yes, I think that is what I also think that the check inspectors should make regular in frequent intervals with the coal lamp.

1002 Q I will pass on to No 25—"Extra supply of safety lamps and their regulation, equal to one third of the number of persons employed below ground, to be kept constantly in good order and ready for use." Do you approve of that? A Yes, it would be a sensible thing if an explosion happened where there were a large number of men employed and there was not one-third extra lamps on hand.

1003 Q Recommendation No 26—"Tearing and knocking roads, and other places necessary, to be promptly entered." Do you know anything of the watering of coal mines? A Not much.

1004 Q Do you know anything of the danger of dust in coal mines? A No.

1005 Q When you examined Mount Kennedy, did it appear as parts to be a very dusty mine? A No, it did not.

1006 Q I pass on to Recommendation No 27—"Instructions to employees regularly on the means of escape." Do you know the means of escape from the collieries you have worked on? A Usually there is only one means of escape in England, in amount of there being a shaft, but then there is the road and the downcast.

1007 Q I mean in this State? A I have only worked at Ball.

1008 Q How many shafts are there? A One only. Two for two different districts.

1009 Q Did you know the order for the district you were not working in? A No.

1010 Q Would you approve of the recommendation that the means should be instructed regularly as the different ways of escape from a mine? A Yes.

1011 Q Who should give these instructions? A The Manager, or the order manager.

1012 Q Recommendation No 28—"Coal mines Act to forbid a black list of employees being kept, and punishing improper practices of discharged persons obtaining employment." Do you know anything of a black list in the district? A No.

1013 Q Do you know of any instance where men have been discharged, and afterwards presented from obtaining employment? A No, not directly, I have heard more than I have known about personally.

1014 Q Have you heard about it frequently? A I have heard it talked about. I know a man was discharged from South Ball for not snuffing his coal, but the general talk was that he had made a check inspection and given it as an adverse report, and then was a great shame on him.

1015 Q Who was he? A I cannot remember his name.

1016 Q Was he prevented from obtaining employment elsewhere? A Yes, he had to leave the district.

1017 Q Do you think that the provision forbidding the keeping a black list would tend to the better management of the collieries? A Yes, if you can get it done. I do not think you will be able to deal with the question at all.

Examined by Mr. Robertson.

1018 Q About this fall in the miners' strike in New South Wales, do you know when the fall occurred? A No, I do not.

1019 Q It may have been quite recent, at your time? A I think not, for the reason that there were black marks on it, or noted about it, of the miners having struck that way for some time.

1020 Q It is sometimes very difficult to remember fall in a mine, many? A I admit that, but this place might have been made better by the staff being posted at the side.

1021 Q What signs was there over the top of the hill? A Just a space enough for me to cross over.

1022 Q Was it very much below the level of the ground? A Yes, it was about 10 ft, and we had to climb up on one side and down the other side.

1023 Q As to your inspection of Mount Kennedy, when I think you and the management had been made aware of your intended visit? A Yes.

1024 Q You think that great preparations were made in anticipation of your visit—tell us what preparations could be made? A Preparations could be made in the way of putting in extra stoppings, if needed, making the stoppings up better than they were before, or under ground, drainage, and putting the bottom up, except to the last. I know one case as regards here—[interrupted].

1025 Q I am asking about Mount Kennedy? A It is possible that was the way in which they could improve matters, and they could also clear the miners' way.

1026 Q Do you say that the management of Mount Kennedy was aware that your visit was postponed for a fortnight? A I did not say that.

1027 Q You might have gone the next day? A That is so, I might have gone the next day.

1028 Q So that in this case no preparations could have been made? A But because of the delay they had time to make them.

1029 Q Do you think they would keep on making preparations for six months if you had stayed away that time? A Well, I believe that the expectation of time keeps the management up to the best as nearly as possible.

1030 Q At the time of your visit to Caminal, was the restriction by means of a furnace? A Yes.

1031 Q And the men had been rapidly developed during that time? A Yes, they were just driving out the work on the dip.

1032 Q Possibly the men had outstripped the capacity of the furnace? A Yes.

1033 Q Do you think they had a fire worked? A Yes.

1034 Q Was not that decided upon in view of the emergency was recognized? A Yes.

1035 Q As you said the fire was critical? A I believe that to be so, if there is an explanation to justify a breach of the law I make it known. I think that report I put in a paragraph that the management was rushing on with a new fire.

1036 Q You mean that they were showing every disposition to improve matters? A Yes, I believe they did. The question is whether they should go into the matter, or have taken out some of the men working in that district, and they had the law worked, or had more men there.

Witness J. Wynn, 21 January 1909

- 9113 Q Is it the matter of the aneroidometer, there is no valve in Glenmount aneroidometer? A Yes, should be the same as the Clark's aneroidometer and there should not be any difference between them as to the outside and the Government Inspector.
- 9114 Q Do they not all buy them in the same market? A Yes.
- 9115 Q And they are all liable to get out of order? A Where there are two instruments against one, it is not probable to say that the two are wrong and that the one is right.
- 9116 Q You say that the Government Inspector admitted that his reading was wrong? A He believed that his instrument was out of order, and did not go to work there.
- 9117 Q How is it now, you would doubt that? A Yes, because the Government Inspector has power to get his instrument tested at any time.
- 9118 Q But he might find that his instrument is not working well? A But he can test it with the Meteorologist's one recent at any Colliery.
- 9119 Q And you say "two against one," you mean your own aneroidometer? A Yes.
- 9120 Q That did not seem to be as satisfactory as was desired? A No; not in that one particular case.
- 9121 Q Who was Robert Farley, whom you spoke of as having been the resident of Mr. Ewart? A He was the chief inspector appointed at that time to try to accompany me round.
- 9122 Q Is he there now? A Yes.
- 9123 Q Coming to the matter of the temperature in the Helensburgh Colliery. I think you said it was rather high in the pillars—80°? A That is what I think myself. It seemed to me to be rather warm.
- 9124 Q Do you know what the temperature of the strata is there? A No; but probably it is pretty high, there being a deep shaft. It is 50° probably.
- 9125 Q It is 80°, so that there is nothing at all surprising in finding the air 82° where the surface temperature of the strata is 80°? A Of a time I simply recalled that as being the highest I found.
- 9126 Q Do you know that the temperature has since been taken by the chief inspector, and found to be lower? A No, no.
- 9127 Q You complain about the daily reads in the Helensburgh Colliery? A Yes, the travelling read, when I call, very faulty.
- 9128 Q Do you know the length of the travelling road and the nature of ways in that Colliery? A No; I could form no idea. I know they are very long, because it took five days to travel round them.
- 9129 Q And you do not see all the work by a long way? A I visited them in a machine once all over the place—the standard workings, and some of the old workings. I expected most of them.
- 9130 Q Two of them the road for watering 20 or 30 miles of roadway would be a pretty big one? A Yes, to do that it would be.
- 9131 Q Especially where no water is available? A Yes. I think I could make a suggestion which would help to alleviate that trouble. If you could make the horses travel the roads in the train anyway, it would help to keep down the dust they make, and it would go out by the open air shaft, and would not be so bad.
- 9132 Q Did you observe that in the Helensburgh Wagon ways are an unusual number of travelling ways provided? A There are a large number of travelling ways in the different districts.
- 9133 Q And in the intake workings? A Yes.
- 9134 Q Do you not think that if your suggestion were carried out it would be going a step backwards? A I think it could be all right.
- 9135 Q Do you know that the miners actually petitioned the Minister to have a provision made that all travelling roads should be made in the machine? A I do not know.
- 9136 Q You were four or five days making your inspection and examination? Yes.
- 9137 Q Did you experience mine, is it not? A Yes.
- 9138 Q And a very gassy mine? A Yes.
- 9139 Q And in that inspection you only detected gas in two or three mines? A Yes.
- 9140 Q And that not in any quantity? A We just detected it, and that is all.
- 9141 Q Does that not speak volumes for the vigilance of the officials? A Yes.
- 9142 Q Where you found three or four indications of fire-damp, was it near the face? A Yes, in the working face. In some places it was not.
- 9143 Q Do you not think it possible, in a gassy mine, that you can get into every place throughout the whole of the mine and adjust your lamp at the face so as to detect gas in every one of them? A No.
- 9144 Q You do not think so? A It would be very gassy, if you could do so.
- 9145 Q I think I can demonstrate to you that you could so adjust your lamp as to find an indication of gas in any place. Now, do you think it is fair? A Think what is fair?
- 9146 Q Suppose you find gas coming from the face, on the exit, to pass a reflection on the management? A I have not said it was a reflection on the management.
- 9147 Q You imply so in saying that you found three or four small indications of gas at the face, and pointing out the fact that gas was not reported in the Deputy's book? A That is what I say is a reflection.
- 9148 Q Do you think that if you examine an extensive mine and can only find three or four indications to a point where gas is coming, do you think that is a reflection on the Deputy? A Not because the gas is coming. No. It is a reflection on the management that they do not report it.
- 9149 Q They did not report gas coming from the face? A Not as far as I know.
- 9150 Q Then you demand that in every colliery gas coming from the face, if it can be detected with a lamp, should be reported? A Absolutely so.
- 9151 Q If some contrary to the expenditure of most mining men. If your idea was carried into effect, you might as well close up every gassy mine in any country in the world. A Not at all, no.
- 9152 Q Is not the only thing to have, what you got there, a plentiful supply of pure air to dilute the gas and carry it away? A Yes, but if you do not make a report on the gas—and I was looking over the records for two minutes to see if I could find such reports, and I have failed to find them—and if you have a gassy mine, and there is no report of gas on the book, it is entirely secure what consequences you were in that?
- 9153 Q Did you examine all the work workings? A Yes, but could I do that here.
- 9154 Q You said that you examined all parts of the mine? A I said that we went into a few places in the old workings. We went into every working place.

- 1159 Q Did you find any gas in the waste workings—places where gas would be most likely to accumulate?
- 1160 A Gas would accumulate there if the place was not well ventilated.
- 1161 Q You admit that the work is well ventilated? A Yes, it is.
- 1162 Q And you think that, if gas is found coming from the cut, it should be recorded? A I think that it should be recorded.
- 1163 Q I think you said that the ventilation was good throughout Heidenbergh? A Yes.
- 1164 Q Now, will you be surprised to know that birds have been taken 200 yards and more without out-thoughts? A I did not know that, and I should be surprised at it.
- 1165 Q Do you know that the ordinary size of the pillars is from 300 yards to 20 yards? A No, I do not.
- 1166 Q That is so? A That would depend on the ordinary size of the pillars.
- 1167 Q Yes, it is? A Then no wonder that you have difficulty of roadway.
- 1168 Q There is no reason why out-thoughts should be made every 30 yards? A You increase the danger the further you go without them.
- 1169 Q But, as a rule, the necessity of having large pillars to support the roof is a deep matter, how can you have these out-thoughts? A Do you mean pillars for the protection of the main road?
- 1170 Q And also for the protection of the beds? The greater the depth, the greater the necessity for large pillars? A That would be so.
- 1171 Q If you cut the pillars up by making out throughs, you would weaken the pillars? A A cut through, if that space would be nothing in regard to weakening the roof.
- 1172 Q You think not? A I do especially in that case pillar. I think there is no reason why it should not be covered out.
- 1173 Q How long is it since Inspector Lewis recorded the gas at Buhl, and went home without doing anything else? A It is twenty two or twenty three years ago.
- 1174 Q Is it not more than that? A Perhaps it is. I would not say. It may be more than that.
- 1175 Q Inspector Lewis was then the only inspector for the whole of the Colony? A Yes.
- 1176 Q You said that the practice of opening entry inspectors showing was dangerous in the presence of gas? A Yes, in the presence of gas.
- 1177 Q Who thinks that any one would fire a shot under any circumstances with gas in the place? A I mean with the holder of those long gas in the place.
- 1178 Q Do you think it is reasonable that any official would fire a shot with gas in the place? A He would, of course, be very simple to do such a thing.
- 1179 Is there any great difference between firing a shot with a mine and the firing of it with a naked light? A A heated wire does not cause an explosion, as a rule.
- 1180 Q Would you like to put a heated wire in fire-damp? A It is considered to be a more safe practice to fire a shot with a heated wire.
- 1181 Q If there was a proposal for igniting a flame without exposure to the air at all, would it not be preferable? A I think it would.
- 1182 Q Would not electricity be preferable? A I am not competent to answer that question, I do not understand the comparison.
- 1183 Q Is not firing by wire out of date? A It has been in practice for a long time.
- 1184 Q Is it not out of date? A I know of no other method which has superseded it.
- 1185 Q Have you not seen other methods in use at Heidenbergh colliery? A I have not seen any shots fired there.
- 1186 Q Now, about what time. In answer to Mr. Lought, you said that managers might appoint incompetent men, but persons to that was thought that Managers were the best persons to select shot-fires? A Yes. Certainly, in a general way, I would empower the Manager to select the shot-fires. They ought to know best who are the most capable of their work.
- 1187 Q The fact that a deputy fires a shot with a naked light would not necessarily imply incompetence on his part? A No. If he thinks there is no danger he might fire it.
- 1188 Q He might be entering into the system entered by his manager? A Yes, he might be doing that.
- 1189 Q And the shot-fire might be perfectly competent? A Yes, but in the presence of gas it would still be a dangerous practice.
- 1190 Q You mentioned the man of a man who had been dismissed for not extinguishing the coal, and you said it was believed that the real reason was that he had given an untrue report when acting as a check-inspector. Can you give me the name of the man? A I could not.
- 1191 Q You just told me the colliery? A Yes, it was Buhl.
- 1192 Q About what date? A I never thought about the matter until it was suggested to me here. I should say it was 16 years ago, or more than that.

Examined by Mr. Richter —

- 1193 Q I understand you to advocate that managers, shot-fires, and safety managers, should have a certificate to be obtained by examination before they are capable of holding their positions. A Yes, I would certainly be in favor of the under-managers, deputies and shot-fires, holding such certificates.
- 1194 Q You said under-managers. Do you believe that managers should also hold such certificates? A A manager ought not to hold such a position in my opinion, without such certificate.
- 1195 Q And unless he was qualified by examination? And do you think that these managers who hold such certificates should have their certificates, and should qualify themselves by examination? A Yes.
- 1196 Q Do you think that a manager who says that he has no knowledge of his business, and who does not understand his comparison, would be a qualified person to appoint shot-fires? A No, I should think not. I should think such a manager could not exist in this State.
- 1197 Q Do you think that such a person should be a manager? A I do not think so.
- 1198 Q Now, I think that you told us that check-inspectors should be competent men. What standard of proficiency do you think a check-inspector should attain before he is appointed? A Of course, the less does not teach them as it is at present. I think it is desirable that they should be as competent as the firemen and the deputies who examine the working places.
- 1199 Q Then you think that persons before being appointed check inspectors, should hold a certificate, by examination, to show that they are equally competent to a deputy? A Yes.

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- 9519 Q When you made your check inspections, were you offered every facility at the various collieries?
 A No. Manager or other person never put the slightest hindrance in my way while making an examination.
 9520 Q Were you not received with every civility and courtesy? A Yes.
 9521 Q No ill-feeling whatever was shown? A No, I have not a single complaint in that respect.
 (The Commission at 4.20 p.m. adjourned until 10 a.m. the following morning.)

WEDNESDAY, 25 JANUARY, 1902

[The Commission sat at the Court House, Wellington.]

Present:—

C. E. D. MURRAY, Esq., D.C.J. (President.)

D. A. W. ROBERTSON, Esq. Commissioner. B. BETCHER, Esq. Commissioner.

Mr. Bruce Smith, Barrister-at-Law, represented by Mr. Wood, Crown Solicitor's Office, appeared on behalf of the Crown.

Mr. A. A. Williams, Chief Inspector of Collieries, assisted Mr. Bruce Smith.

Mr. A. A. Lynghe, Solicitor, appeared on behalf of—

- (a) the representatives of deceased miners, whether, &c., (riches of the explosion);
- (b) the employees of the Mount Kenilbe Colliery (owners, & others, &c.) and
- (c) the Hawke's Bay Collieries Association (the Southern Mines Union).

Mr. F. Currie appeared on behalf of the Mount Kenilbe Coal and Oil Company (Proprietors of Mount Kenilbe Mine).

(Mr. J. Gerlock, Secretary to the Commission, was present to take shorthand notes of the evidence and proceedings.)

MR. WILLIAM LIVINGSTONE was sworn, and stated as under:—

Examination-in-chief by Mr Currie.

- 9522 Q What is your name? A William Livingstone.
 9523 Q What are you? A A miner.
 9524 Q Where? A At Mount Kenilbe.
 9525 Q How long have you been there? A Fourteen years.
 9526 Q Working as a miner? A Yes, well, lately, I have been deputy and shot-fire—these last two months.
 9527 Q But you have been working as a miner at Mount Kenilbe for the last fourteen years? A Yes.
 9528 Q What parts of the mine have you worked in? A I have been in all the parts, all the sections, &c.
 9529 Q Have you ever worked in the 4th Right? A Yes.
 9530 Q When was that? A It would be in 1901.
 9531 Q How long did you work there? A Five months.
 9532 Q While working there did you ever see any signs of gas? A No.
 9533 Q Have you ever seen gas in any other portion of the mine? A No.
 9534 Q None at all? A None at all.
 9535 Q You say you are a shot-fire now? A Deputy and shot-fire.
 9536 Q How do you fire the shots then? A With the gun.
 9537 Q Have you ever fired them with an open lamp? A Yes.
 9538 Q And you have never seen gas then? A No.
 9539 Q What is your procedure when you are firing with an open lamp? What precautions do you take?
 A About 20 or 30 yards from the face I examine first to see if it is wet, about that distance from the coal-face, and then, if I am satisfied that it is wet enough, I go into the working place and examine to see if there is any gas. I go to the side farthest away from the breasting. That is the first place I go to, to see if there is any there, and, if I am satisfied that there is none there, I go then to the centre of the head and examine there, and then go to where the shot is to be fired, and examine there, and satisfy myself that all is clear before I do fire.
 9540 Q Is the mine a dry mine, or is it a wet, or damp mine? A Well, there is a part of it wet, and other parts of it dry.
 9541 Q Were you there on the day of the disaster? A No, I was not working that day. I was working the night before.
 9542 Q You were not in the mine after the accident? A Yes, I was in it after the accident, morning.
 9543 Q Did you see any of the men that were rescued, or any that were brought out dead? A I saw some of them.
 9544 Q Did you see any signs of burning, or anything of any of their bodies? A Yes, I saw one of the men who there, who was a bit scorched about the arms—Kenilbe Street.
 9545 Q Mr. Justice Gerlock? Q How do you describe what you saw on him? A I saw him angled about the arms—burnt about the arms.
 9546 Q Mr. Currie? Q In what way? Was the skin off, or was it blistered? A The skin was hanging off.
 9547 Q Both hands? A Both arms. It might have been with lifting him. It was just when we had him lifted and put into the ship that I noticed the skin off his arms.
 9548 Q You say you have nothing about the explosion? You were not there until after it occurred?
 A No.
 9549 Q With reference to the mine, what is the state of ventilation there? A At the present time? 9549,

W. G.—W. Longdon, 28 January, 1904.

9200. Q Take the average for the time that you were working there. Did you find it a well-muffled noise? A Well, I found at first, you know, as far as my experience is concerned. I have felt it going on at there, and at other times a bit else, where I, personally, have been working. I have felt it a bit more.
9201. Q Does the outside atmosphere affect the ventilation? A It does at times. It depends on which way the wind is blowing.
9202. Q How do you maintain for the time being sometimes hot and sometimes not? A The noise is sometimes worse for want of putting the bristles close enough up to the working face.
9203. Q I suppose that is usually rectified? A Yes, if the bristles is not close to the working face it must get worse.
9204. Q Do the miners themselves alter these bristlings? A No.
9205. Q You have got to put the dipper? A Yes.
9206. Q And does it already do it, so as that it is done? A Well, there are two of them there, and if the one has not got me to do it, the other one has to do it.
9207. Q But the more, generally, is not allowed to interfere with it? A No, he is not allowed.
9208. Q If you make a complaint about it is the matter attended to at once, is it needed? If you make a complaint to the dipper, or the Manager, or anybody else, do they really any trouble that you complain about? A They have done it for me. I have made a complaint to the dipper as they come round, and have told them I wanted some more bristles, and that I found the powder made lying too long, and I always got it put right for me.
9209. Q And do you know that that is the general practice, of your own knowledge? A As far as I know, it is.
9210. Q I suppose you know the mine well? A Yes.
9211. Q Do you know the mine from the west? A No, I only know the one road, that is, like, perhaps the bristles road, I know the daylight heading.
9212. Mr. Justice Smith. Q That is the one which you know in addition to the ordinary one? A Yes, that is the one I know of. I know the other one years ago, but I do not suppose I could go out by it now.
9213. Mr. Justice. Q You do not think you could find your way out? A No.
9214. Q And you now were instructed in the west end? A No.
9215. Q Is it a custom in the mine to do that—to teach the men how they can get out of the mine? A I do not think it is. It has never been told to me at all again.
9216. Q You have been deputy and shot-fire for the last two months? A Yes.
9217. Q That is since the disaster? A Yes.
9218. Q Is there any real improvement in your income now as compared with what you were earning as a miner? A No.
9219. Q What are you getting? A No. Old a shilling.
9220. Q And as a miner what were your earnings? A I could not tell you just exactly. My wages as a miner varied a little bit, because I have had good luck and bad luck. But I think, putting the two of them together for the last twelve months, there would not be very much difference. They would run very close.
9221. Mr. Justice Smith. Q It would be about equal to what you get as a deputy? A Yes.
9222. Mr. Justice. Q You are a night deputy? A Yes.
9223. Q What are your duties? A I have to go round the working places and examine them to see if they are free from gas, to see that the ventilation is good, and that the rock and sides are secure.
9224. Q And you do that every day? A Every night.

Cross examination by Mr. Lought—

9225. Q I think you give evidence in the Bowdler case? A Yes.
9226. Q And, shortly after you gave that evidence, you were made shot-fire? A No, it was before I gave that evidence.
9227. Q Had you given a proof of your evidence in Bowdler's case before you were made shot-fire? A No, I did not.
9228. Q And you know that your evidence was contradicted by several witnesses? A Yes.
9229. Q Now, have you had any conversation with Mr. Rogers—(interrupted) A I have not.
9230. Q One minute—do you desire to tell me you have had no conversation with your Manager? A Yes, I do that.
9231. Q When did you last see your Manager? A I see him every other night. I have got to see him every other night.
9232. Q Did your Manager know you were coming here to give evidence? A Yes.
9233. Q Did you tell him? A No.
9234. Q Did he tell you? A No.
9235. Q Well, how did he know?
9236. Mr. Justice. I think I might shorten that, your Honor.
9237. Mr. Lought. I have a reason for asking these questions.
9238. Mr. Justice. Mr. Justice, if you have some knowledge of a certain fact you might inform Mr. Lought presently if it would result in his not taking up more time.
9239. Mr. Justice. Very well, your Honor.
- (Mr. Justice then speaks to Mr. Lought privately.)
9240. Mr. Lought. Q Can you tell me how your Manager knew you were going to give evidence? A No.
9241. Q Did he speak to you about your giving evidence? A No.
9242. Q Did you speak to him? A No.
9243. Q Have you given any personal statement of your evidence here? A Yes.
9244. Q When did you first give that statement? A I think it was last Wednesday night, or Thursday night. I am not sure.
9245. Q Was not Mr. Rogers present then? A Yes.
9246. Q Did not he hear the statement you were giving? A Yes.

- 3007 Q And do you mean now to tell me you had no conversation with Mr. Rogers about your evidence?
A I do that.
- 3008 Q How long did it take to prepare the statement of yours? That I am giving you now?
A008 Q The statement that you gave in the presence of Mr. Rogers last Wednesday?
A Yes at it.
- 3010 Q How long did it take to take the statement down?
A I was speaking to them because I was speaking to you.
- 3011 Q Was not it taken down in a second?
A No.
- 3012 Q Who else was present besides Mr. Rogers?
A Mr. Wade and some other gentlemen. I do not know who he was.
- 3013 Q What other officers of the company were present besides Mr. Rogers?
A None.
- 3014 Q Now, you say that, with the exception of this conversation last Wednesday, you had no conversation with Mr. Rogers about your statement?
A Yes.
- 3015 Q You might tell me how often you opened the safety lamp to fire shots?
A It depended upon how many shots there were that wanted firing.
- 3016 Q How often have you opened the safety lamp to fire the fuse?
A I could not tell you just exactly how many times I have opened the lamp. I have opened it as many times as I wanted opening.
- 3017 Q Then did I understand that you have not fired with the mine at all?
A Yes.
- 3018 Q Your practice has been to open the lamp and fire the shot with the mine light?
A Yes.
- 3019 Q Did not you say before that your practice was to fire with the mine?
A I say that it is my practice now. I am working on the night shift now, and there is no shot here. This was when I was working in the daytime.
- 3020 Q How long have you been on the night shift?
A I have been on that night shift five weeks now.
- 3021 Q Since you have been on the night shift have you fired any shots?
A No.
- 3022 Q Before you were on the night shift how long were you shot fire?
A A month.
- 3023 Q And during the whole of that month you always fired shots with the mine light?
A Yes.
- 3024 Q On how many occasions in a day would you fire shots that way?
A Well, I could just about tell you that easily enough if I had time to consider; it might be about five or six times, but no more.
- 3025 Q Can you give me any one occasion when you opened waiting was done before the shot was fired?
A None, during the time that I was on the day shift.
- 3026 Q Now, your answer is that for a whole month no waiting was done in the vicinity of where any shot was fired by you?
A Yes. I can assure you of that.
- 3027 Q And were you not firing shots in an absolutely dark part of the mine?
A I was not.
- 3028 Q Well, where were you firing shots?
A In the 34th Right.
- 3029 Q Is that the only place?
A That is the only place.
- 3030 Q Did not you fire one shot in the 34th Right?
A No.
- 3031 Q Were you not shot fire for the whole No. 1 Right district?
A Yes.
- 3032 Q Was fired the shot, if you did not?
A There were some fired there.
- 3033 Q Then, did I understand that for a whole month the only shots fired in the whole of that No. 1 Right district were in the 34th Right?
A Yes.
- 3034 Q Was that a dump place, the whole of it?
A Yes, the lot of it.
- 3035 Q That being so, I may say that there was no need for you to make an exception to see whether it was damp or not?
A I was keeping on the safe side.
- 3036 Q You and you always were back about 30 yards from the face, and exposed to see if it were wet?
A Yes.
- 3037 Q If it was in a dump place, what did you want to go back every time 30 yards to examine whether it was wet or not?
A I was doing my duty. It was custom, and I did it.
- 3038 Q But would not you see whether the whole place was wet when you were in it?
A Yes.
- 3039 Q Then what would you want to go back 30 yards every time for?
A Well, I was making an exam to see that it was wet.
- 3040 Q Now, how long did it take you to examine for gas?
A About a few seconds, not over long.
- 3041 Q And what would you do in examining the gas before you fired the shot? Tell me what you would do, and I want to know whether you knew how to examine for gas?
A I would screw down my lamp all there was just a little flame, put it up gradually to the road, and see there if there were any gas there. If there were any gas there I could soon know by its drawing up the flame, and causing a little blue cap. I would know that well.
- 3042 Q That was your examination for gas?
A Yes.
- 3043 Q So you want to change that answer, or add anything to it?
A That is just about as plain as I can tell you.
- 3044 Q Then you did not put your lamp near the face of the coal at all?
A Yes, that is where my lamp was.
- 3045 Q You did not say so,—"I ask you again, do you want to add anything to that answer as to your examination for gas?"
A You can add that to it. I was speaking you know what I meant.
- 3046 Q You said you put your lamp up to the face?
A Just as close as I could get it to the coal face.
- 3047 Q Well, now, how far would it be off the face?
A Just as close as I could get it to the coal face.
- 3048 Q And during the whole of that time, you say, you never got any indication of gas?
A No.
- 3049 Q Did you try or examine with the hydrogen lamp?
A No.
- 3050 Q Do you know how to use the hydrogen lamp?
A No. I have never seen it.
- 3051 Q Do you know that the ordinary safety lamp will only show from about 15 to 25 per cent. of gas?
A Yes. I know that well.
- 3052 Q Do you know that 15 per cent. is dangerous under certain conditions of dust?
A I believe it is.
- 3053 Q So that there may have been at 15 per cent. of gas in any of the places you examined and you could not discover it?
A Yes, the lamp that I use only shows about 25 per cent.
- 3054 Q And, leaving those things, you examined me in the dangerous and as to the gas—did you then open your lamp and light the face?
A Yes.
- 3055 Q Did you know how deeply the hole had been drilled?
A No, I had to take the miner's word for it.
- 3056 Q In such case you took the miner's word?
A Yes, and that was a point that I think is not right.

Witness—W. Lorington, M. J. Jones, 1891

- 6017 Q What do you mean by that? I The shot-line should be at exactly the depth of the hole here?
- 6018 Q Why did not you know? A It was tampered up before I got there.
- 6019 Q Could not you order them to take the tampering away? A Well, it appears that it is the rule (meaning that the present practice is the rule).
- 6020 Q Then, on your opinion, was the practice of opening the safety lamp and lighting the fire as the usual light a dangerous one? A It would be a hard question to answer whether it was or not.
- 6021 Q But you appear to have some doubt as to whether it was a safe practice? A Well, there is a mistake that if there was gas there it was a dangerous practice.
- 6022 Q And I suppose if there was any accumulation of dust there it was a dangerous practice? A Yes.
- 6023 Q That will you ask about that is a dangerous practice? A Yes, I admit that it is.
- 6024 Q And did your Manager know that you were lighting the fan in this way? A Yes.
- 6025 Q And I think that practice has been stopped for about two weeks, since some evidence was given here? A I do not know. I am working at night here.
- 6026 Q Do I understand that, even when you were firing these shots with the ordred light, you knew you were running a considerable danger? A No, I did not think there was any danger, as I would not have done it.
- 6027 Q Do you think now that there was a danger? A In that particular part?
- 6028 Q Well, we are only talking about the shot you fired? A Oh, well, there was no danger when I was firing the shot.
- 6029 Q But there may have been danger there if there was gas, which your lamp would not detect? A Yes.
- 6030 Q Well now, might there not have been danger from gas of which you did not know? A I cannot tell.
- 6031 Q Now, as a matter of fact, was not those danger? A No, I do not think there was. As a matter of fact, I would not open my lamp if I thought there was danger.
- 6032 Q Who chose you as a deputy? A I cannot tell you that. I can tell you how it was that I was appointed. I ask tell you who it was that came to me in my working place and asked me if I would take it.
- 6033 Q Who was that? A Mr. Hordless, and I told him definitely that I would as soon get a bit of coal, and I would say that yet.
- 6034 Q Two bits, I suppose, that the responsibility was a bit too much for you? A I suppose I am just as capable of knowing it as anyone who is there.
- 6035 Q And you do think you are competent to be a deputy? A Until it is proved that I am not.
- 6036 Q Have you studied any books upon gas? A No, I have not.
- 6037 Q Have you read any mining works as to it? A No.
- 6038 Q Do you know what the constituents of light non-inflamed hydrogen are? A No, I do not.
- 6039 Q Do you know what proportion of light non-inflamed hydrogen is dangerous? A No, that is not of my knowledge.
- 6040 Mr. Robertson Q Why ask that, when he says he does not know the constituents of light non-inflamed hydrogen?
- 6041 Mr. Lorington I With every respect to the Court, what I wanted to show was that a deputy was appointed who had no knowledge of gas.
- 6042 Mr. Hordless I He says that all the knowledge he has is a practical knowledge of coal-gassing, and a practical knowledge of testing for gas, which does not involve a knowledge of chemistry.
- 6043 Mr. Lorington What I submit to the Commission is this—that the Commission may find, as a fact, that a person who was appointed to the position of deputy should have a suitable knowledge of gas.
- 6044 Mr. Hordless That may be so, but it is of no use going on taking the witness then questioning him by his legal by requiring any knowledge of chemistry.
- 6045 Mr. Robertson I take it that you claim, Mr. Lorington, that men in the position of deputy should have a suitable knowledge of some gases?
- 6046 Mr. Lorington To a certain degree—that they should know something as to the constituents of gas.
- 6047 Mr. Robertson It will save us a lot of trouble if you assume that they do not know it.
- 6048 Mr. Lorington May I take it that the Commission assumes that they do not?
- 6049 Mr. Robertson Yes may take it that they do not.
- 6050 Mr. Hordless A few questions to the witness will settle that. The only reason why Mr. Robertson made that remark, and I followed, was because it is really only waste of time to analyze a coal of settled questions.
- 6051 Mr. Lorington Very well, your Honor.
- 6052 Q I take it, Mr. Lorington, that you have never passed any examination for any certificate? A No.
- 6053 Q Did you ever discover black damp in Kanika? A No, I never discovered black-damp either.
- 6054 Q Would you know the indications of black damp? A Yes, I know it well when I see it. I have wrought no long amongst it.
- 6055 Q I may take it that you have never acted as a deputy in any other mine? A No.
- 6056 Q And, I suppose, until you were appointed as deputy in Kanika, you had not become used to the safety-lamp? You had used a face lamp all the time? A Yes, until a few days all the time.
- 6057 Q Is a fact that you only used the safety-lamp when you were appointed deputy? A Yes.
- 6058 Q Who recommended you as the one of the safety-lamp two months ago? A Looking for gas?
- 6059 Q Yes. A I had fine pay's experience, following up a deputy as Hume.
- 6060 Q I asked you who instructed you as the use of the safety-lamp? A Nobody.
- 6061 Q Did you tell me that Mr. Rogers knew you were firing the shot with the open lamp? A Well, I suppose he did. Mr. Hordless knew, anyway, if Mr. Rogers did not.
- 6062 Q You speak of having complained of the mine having too long in your working place? A Yes.
- 6063 Q To whom did you complain? A The deputies.
- 6064 Q How often again? A I have been amongst the lot of them.
- 6065 Mr. Robertson Q Did Mr. Lorington say anything about mines? —

9406. Mr. Langley? Q Yes, who was the deputy in whom you complained? A The whole lot of them.
9407. Q That gives me no information? A Well, you know — (Interposed)
9408. Q I do not know anything about it? A Well, there were Evans, and Nelson, and Dungey.
9409. Q I want to know when it was that you complained to Evans, and where? A I could not tell you when, but I could tell you the way was.
9410. Q What was it? A The shaft system.
9411. Q What part? A I could not just tell you exactly the part. I was working most in the headlogs. I know one of the places was the main heading in the shaft district.
9412. And how long had the miners been lying there that you complained of? A It would be about a couple of hours after we fired the shot.
9413. Q What was the fault? A The heading was not strong enough.
9414. Q How far went away from the face? A I have seen it 25 or 35 yards, or, it may be, 30 yards back.
9415. Q And how far was the nearest cut through? A Well, we generally put the cut through about 30 or 35 yards.
9416. Q But where was it then? A As we went on ahead that is the distance we would expect to put the line (meaning the line of cut through).
9417. Q In that particular case do you know how far the cut through was away? A I could not say.
9418. Q Had the place been drawn 15 or 20 yards without a cut through? A Not in that place.
9419. Q What is the longest drive in Kneble's about a cut through that you know of? A I think the heads in the 24th Right are the longest.
9420. A What distance are they drawn? A There are some of them up about 50 or 60 yards, I can say.
9421. Q Those are the longest? A Yes.
9422. Q And, in your opinion, is that quite sufficient to draw a head without a cut through? A I do not say that. I do not believe in that at all.
9423. Q Where do you believe in? A About 25 or 30 yards.
9424. Q And anything beyond 25 or 30 yards I suppose, would considerably weaken the ventilation? A There is a chance of damaging the bracketing. It is a long way to carry the headlogs.
9425. Q And you speak about the westerly wind affecting the ventilation—have you known the air in Kneble's to be affected by the westerlies? A I could not tell you whether it was westerlies or northerlies, but I have seen it changed about.
9426. Q About how often? A I could not tell you from memory how often it was.
9427. Q About how often? A I could not tell you. I would be consulting myself if I said anything at all, because I could not tell you.
9428. Q I want an approximation, say, for the westerlies—once twice, three, four, five, or ten times? A I could not tell you that. I do not want to say anything I know nothing about. It turned at times.
9429. Q Was it a common occurrence? A No.
9430. Q When it turned at times, do you know how long it remained turned? A I could not tell you.
9431. Q Roughly speaking? A I could not tell you.
9432. Q How long ago is it since you last remember it being reversed? A It is of no use asking me that, because I could not give you any indication as to how long ago. I could be telling you if I were in any way sure.
9433. Q But I remind you that, if you think a little, your memory is good enough to take you back to an occurrence which you have remembered? A It could not take me back to that.
9434. Q Was it within the last twelve months? A I am sure I could not say.
9435. Q But you do remember the occurrence? A I do remember it, but the time I cannot tell.
9436. Q Where were you working at that time? A That is another thing it is hard to tell, because I was shifting from one place to another pretty often.
9437. Q Have you any reason for not telling me? A No, if I knew I would tell you straight out. I am not afraid to tell, if I know.
9438. Q When the air was reversed, what was the effect on the men in their working places? A It did not make much effect on the men, for the time being. It did not last that long before it changed again to its proper course. I have seen it changing with the barometer not drawing properly.
9439. Q How often have you seen it changing through the barometer not drawing properly? A I cannot tell you.
9440. Q Roughly? A I cannot tell you.
9441. Q You remember two drawings—you agreed through the barometer not drawing properly, and the other caused by the westerlies? A No, I could not tell you whether it was a westerly or a northerly. I have told you it was a change in the weather.
9442. Q Cannot you remember when it was that the barometer did not draw properly? A No.
9443. Q Have you no idea at all? A Not the slightest.
9444. Q Cannot you think back? A No, I have a bad memory, too bad to think back to that time.
9445. Q In addition to the air being reversed, have you known the air to be stationary? A I could not say for you whether it would stand still or not.
9446. Q Well, you occasionally were in standing still? A It may be, when it is reversing.
9447. Q How long would it be in this standing still condition? A It is of no use to ask me that, because I cannot give you an answer.
9448. Q Do you know anything about the danger of coal dust? A No.
9449. Q Now, I would like to ask you about these recommendations—No. 1, Manages, under-manages, disputes, and what faces, to hold certificates of competency by examination, and to have the years partial mining experience, before being eligible for respective positions? Do you approve of that as a general rule? A I do.
9450. Q Recommendation No. 2—do you think the Inspector should have the power, if he deem it necessary, to order the use of safety lamps? A I do.
9451. Q Recommendation No. 3—Vacation by persons prohibited, and fire prohibited? Do you approve of that? I take it that, with your knowledge, you do know the advantage of the law over the barometer? A I know the advantage all right.

- 9432 Q Do you approve of that recommendation? A Well, I have some fans that were not much better than the furnace which we have at Korbly.
- 9433 Q But I take it from that remark that the furnace at Korbly is not too good? A It is not much more.
- 9434 Q But the working of it has not been too good in your own experience? A It has not been so good.
- 9435 Q Then I take it, from your own experience, you approve of this recommendation—"Verification by furnace prohibited, and fans substituted," and your approval is based on your general practical knowledge? A I think that is a part that I would just as soon not touch on at all.
- 9436 Q Why—do you not think you are competent to express an opinion? A Well, I believe in the fans.
- 9437 Q But do you not think you are competent to express an opinion? A As to which is the best?
- 9438 Mr. House: The opinion is not as to whether fans are, or are not, better than furnaces. Everything points to that here. The opinion of the witness is asked as to whether it is equivalent that there should be legislation to compel all mines to future to adopt fans instead of furnaces.
- 9439 Mr. Lusk: Yes, your Honor.
- 9440 Q Yes, I believe in the words of this recommendation—"Verification by furnace prohibited, and fans substituted?" A I understand perfectly well.
- 9441 Q You have read all that, I suppose, before? A I understand quite well what you mean.
- 9442 Q What I want to know is, do you consider yourself not competent to express an opinion on that third recommendation? A No; I do not.
- 9443 Q You consider you are competent? A Yes.
- 9444 Q Well, will you give me an opinion? A I have given it to you.
- 9445 Q What is it? A I tell you I believe in fans.
- 9446 Q I want to carry you a little further—do you approve of this part of the recommendation, that the verification be furnished by prohibited? A I understand what that last word means.
- 9447 Mr. House: I believe he hardly understands what that last word means.
- 9448 Mr. Lusk: I understand you have seen all these recommendations already? A Yes.
- 9449 Q And have you considered them? A I did not consider that much.
- 9450 Q But you did consider it some? A Well, I have told you the consideration I gave it. I told you I believed in fans.
- 9451 Q Now, do you approve of all the furnaces being done away with, and fans substituted for them? A I understand quite well what you mean.
- 9452 Q Would you approve of all the furnaces being done away with and the fans substituted? A Yes; if we can get it.
- 9453 Q Do you know of any reason why you should not get it? A No.
- 9454 Q Would not the additional advantages more than compensate for the cost? A I expect to our time being occupied on expert opinion on matters as which the mine is not an expert.
- 9455 Mr. House: The witness has said, practically, that he prefers a fan to a furnace and believes a fan to be very much better than a furnace. He cannot pretend in any way that he would stone on the larger question.
- 9456 Mr. Lusk: Very well. Perhaps your Honor thinks I have followed that sufficiently.
- 9457 Q Recommendation No. 4—"Waste workings to be absolutely sealed off, and accompanied by witness seals (for fear of persons), such seals always not to come in contact with outside" (do you understand that)? A Yes.
- 9458 Q Do you approve of that? A Yes.
- 9459 Q Recommendation No. 5—"All places, except prospecting drives, to have cut throats not more than 30 yards apart?" A Yes, I believe in that.
- 9460 Q Recommendation No. 6—"Inspection with locked safety lamp in all cases?" A Yes; a very good recommendation.
- 9461 Q A good recommendation? A Yes.
- 9462 Q Recommendation No. 8—"Minimum of 500 cubic feet of air per minute to be provided for every horse, instead of 160, as at present." A That is where we are in regard to.
- 9463 Q Recommendation Nos. 9 and 10. I think the Committee have already expressed an opinion on those.
- 9464 Mr. Lusk: Yes, your Honor?
- 9465 Mr. Lusk: I do not abandon them. The Committee have already indicated that they approve of them.
- 9466 Mr. House: Of what?
- 9467 Mr. Lusk: Of Recommendations 9 and 10.
- 9468 Mr. Edington: The Committee have not said that.
- 9469 Mr. House: Only regarding the double doors.
- 9470 Mr. Lusk: I understood that it was as regards both—the doors to close and remain closed at their own motion, and the double doors.
- 9471 Mr. House: That is already provided for.
- 9472 Mr. Lusk: Well, I will pass on.
- 9473 Q Recommendation No. 11—"Weekly measurement of air in each section, and report thereof sent to Inspector." A Yes, a very good provision.
- 9474 Q Have you ever taken the air at Mount Korbly? A No.
- 9475 Q Do you know how to take the air? A No.
- 9476 Q Have you any idea? A No; not the slightest.
- 9477 Q Do you know what an anemometer is? A No.
- 9478 Q Where, in your opinion, should the air be taken—the measurement of the air? A I should think you would take it in the intake. That is where the strength is.
- 9479 Q And where else? A I could hardly tell you. I never took. I do not know anything about that. That is only my opinion of where it should be taken.
- 9480 Q Do you not know that the taking of the air in the intake is no indication of what air is working in the workings? A No.

9504. Q. Then, when you are crossing for gas in a dipper, have you any idea at all of what current of air is passing? A. I have no idea what current is passing, but I have an idea whether it is strong enough to wipe out the gas, if it is there.
9505. Q. Supposing you discovered with your safety lamp a considerable percentage of fire-damp? A. Yes.
9506. Q. You would only know it was fire-damp, I suppose, from the blow up on your safety lamp?
- A. Yes.
9507. Q. Now, what would you do to get rid of that gas? A. I would hasten close up to the face.
9508. Q. Would you do anything else? A. No. I would put it up close to the face, and see if that would take it away.
9509. Q. When would you find out whether it had taken it away or not? A. I suppose I would be back a bit later. I might go into some of the other working places, and then go back again, when I would be any time so, so long if it were not, and if it were not out I would get up a danger board there.
9510. Q. Is that all you would do? A. Yes.
9511. Q. After you put up the danger board, what would you do? A. Report it to the Manager and the boss.
9512. Q. Then, do I understand you to say you do not know how to shift that gas? A. I know told you how I would shift that gas.
9513. Q. Beyond that, would you have any other idea as to how to shift that gas? A. No.
9514. Q. I suppose you would not attempt to light it to get rid of it? A. It is likely I would if I wanted to get rid of myself.
9515. Q. You know that one witness said that he let the gas to get rid of it? A. I do not know. I heard you say that.
9516. Q. Would not you think the weekly measurement of the air would be a better indication of what air was travelling if it were taken on each shift? A. It would give you a better idea of how it was travelling.
9517. Q. Recommendation No. 12—"Extra supply of safety lamps and their requisites, equal to one-third of number of persons employed, below ground, to be kept constantly in good order and ready for use." Do you approve of that? A. Yes.
9518. Q. Do you know anything about the supply of safety lamps at the time of the disaster at Kenville?
- A. No. I do not.
9519. Q. Did you try to get a lamp, to go in? A. No.
9520. Q. Were not you there the night of the disaster? A. Yes.
9521. Q. Did you go into the mine? A. Not that night.
9522. Q. Why not? A. Because I had a lot of trouble at home with some of those who were in it.
9523. Q. You do not know anything as to the supply of safety lamps that was there? A.
9524. Q. Recommendation No. 13—"Freezing and heating rooms, and other places necessary, to be properly maintained." A. Yes, a very good idea, that.
9525. Q. Can you tell me the eastern part of the Kenville Mine? A. At the present time?
9526. Q. Yes. A. Well, on my track, it is the 26th Right.
9527. Q. And you might tell me about how much dirt is lying on the floor there, in tracks? A. I could not tell you that very well.
9528. Q. Well, as it is feet, or what is it? A. Is to feet?
9529. Q. How much is there, roughly? A. I could not tell you. It might be an inch or two, but not more than that, kicked up by the horses' feet.
9530. Q. That is the eastern part? A. Yes.
9531. Q. Have you had that watered? A. Yes.
9532. Q. How often? A. Every night.
9533. Q. And, although it is watered every night, there is still so much of dirt went morning? A. Not where we water it.
9534. Q. Then, although you water it, it still keeps up these dirty conditions? A. No, it does not. It keeps close to the floor.
9535. Q. Where does this 1½ inch of dirt go? A. Either down the road. Where it is watered is the 33 yards from the face, and below that a dusty.
9536. Q. Then, except within 30 yards of the coal face, the 26th Right is not watered at all? A. That is right. Of course the heading road is watered.
9537. Q. And, in your opinion, should that particular road that is not watered be watered? A. No.
9538. Q. Why not? A. It is not necessary that it should.
9539. Q. Do you not know of any danger arising from the dust there? A. No, I do not know of any danger in that part.
9540. Q. Recommendation No. 14—"Managers compelled to give more personal time and attention to management of colliery." What has been your experience of Mr Rogers in Kenville underground? How often have you seen him? A. It would. Sometimes I have seen him in my place, personally you know, once a week, and the next week he might not be in at all.
9541. Q. Recommendation No. 15—"Use of matchlocks enforced." What do you say about that? A. Well, they are not a bad idea at Kenville.
9542. Q. What are they? A. It is B.
9543. Q. Oh, well, that is a good one? A. Yes, it is a fair one.
9544. Q. How wide are they? A. Four feet.
9545. Q. How deep? A. About 4 feet, and 6 feet high.
9546. Q. Recommendation No. 15—"Instruction to employees regularly on means of escape?" A. Yes; I approve of that.
9547. Q. And when would you have to give the instruction? A. The best time would be the deputy. That is the man that should give the instruction, I should think.
9548. Q. And when do you think he should give them the instruction—every month, or every quarter, every year, or how? A. I suppose, if you gave it to them once, you would not require to give it to them again.
9549. Q. I am supposing that the men would change every now and then? A. Then you should give it every quarter.

Witness—W. Longstone, 21 January, 1909

9545. Q Would that average much time? A No.
 9546. Q Encouragement No. 10—"Coal Mines Act to forbid a third lot of employees being kept, and providing complete provision of discharged persons obtaining employment." Have you ever read of a black-list in this district? A I have read in the papers about that black-list. Will you just explain what that means about the Maudslayi?
 9547. Q I ask you to explain? A But I do not know what you mean.
 9548. Q Then I will not ask you at all? A Does that mean giving a man the sack?
 9549. Q You say you do not know what a black list is? A No.
 9550. Q Well, now, that will do you. Now, I want to know, do you know of any man who has been black-listed for reporting anything? A No, I do not.
 9551. Q Now, Recommendation No. 20—"Safety-lamps not to be introduced for shooting?" A Yes; I approve of that.

Examination by Mr Bruce Barker.—

9552. Q You were asked a number of questions by Mr Lynght as to whether you had had interviews and conversations with Mr Rogers? A Yes.
 9553. Q Did you ever have any conversations with Mr Lynght before you gave evidence? A No.
 9554. Q Will you tell me what experience you had before you went into Mount Kembla? A Twelve years in Scotland, fourteen years in Kembla, twenty-one years all told.
 9555. Q You said something about New Zealand too? A No.
 9556. Q Then you were nearly as long at work in Scotland as you have been here? A Yes.
 9557. Q What were you in Scotland? A Miner, after the first four years of which, I told Mr Lynght, I was following up the deputy in water-lanes.
 9558. Q What was your business when you followed up the deputy? A Water-baler.
 9559. Q Were you always, or nearly always, with the deputy? A I was with him when he examined the places in the mine in the morning.
 9560. Q Was that with a safety-lamp? A We had to go down in to the pits in the morning.
 9561. Q Was that with a safety-lamp? A Yes, he had a safety lamp, and I had a flare lamp. My lamp was left back in the road about 30 or 40 yards. I did not take it up to the face.
 9562. Q I understand you have had three or four years' experience in following him up and seeing how he ascertained whether there was any gas? A Yes.
 9563. Q Is that the course you adopt now, the same as adopted by him,—do you put the lamp in the same place and test it in the same way? A Yes.
 9564. Q When you were appointed to this position did you make that known, that you had had that experience? A Yes.
 9565. Q To whom? A To Mr Hutchins.
 9566. Q Then, do I understand that before you were appointed to this position, you had a conversation with Mr Hutchins, and he ascertained what your experience had been? A No, he asked me this when he came on to ask me if I would take the job.
 9567. Q He asked you what? A He asked me if I had had any experience in regard to gas, and that is what I told him.
 9568. Q And that was before you were appointed? A Yes.
 9569. Q Now, do you know the special rules,—have you a copy of them? A Yes.
 9570. Q Have you read them? A Yes.
 9571. Q Had you read them before you were made deputy? A Not much.
 9572. Q Have you studied them since then? A Yes.
 9573. Q Have you been through the list of duties of the deputy? A Yes, that is Special Rule No. 9.
 9574. Q Are there any of these duties which you feel you are not competent to perform? A No, I do not think there are. There might be, you know, but I do not think there are. I have been carrying out these duties as far as these rules are concerned, so far as I have got yet.
 9575. Q And I understand that you do not claim to understand the chemistry of gas? A No; I have only a practical knowledge.
 9576. Q You say you have gone, in the fourteen years that you have been to the Mount Kembla Mine, and with gas? A No, I have never met it.
 9577. Q Have you heard it going? You know the expression "slapping"? A Yes, I have it, but I have never heard it, or seen it.
 9578. Q Have you heard men say that they met with it in the mine? A Yes; I have heard different men saying that.
 9579. Q And have you had it described to you, as to what happened? A No.
 9580. Q For how many years have you heard them say that they have been meeting with gas? A Oh, at different times I have heard them saying that.
 9581. Q Over the period of fourteen years? A Yes.
 9582. Q Have you disagreed that,—have you believed it, or disbelieved it? A I did not know exactly whether to believe them or not. I have listened to them saying, that was all.
 9583. Q But you have never met with it yourself? A No.
 9584. Q Now, leaving off this from time to time over a period of years, did not that make you hesitate to go in to the shaft with a naked light? A No.
 9585. Q Why was that,—did you discredit the reports? A I did not altogether believe what they had said.
 9586. Q Was it that, until the accident, you did not quite realize the danger? A Yes.
 9587. Q Was that, you would not alter your attitude of mind? A Yes, it was.
 9588. Q Where did you learn the effect that the presence of gas would have upon a safety-lamp? Was it in going through with the deputy in Scotland? A Yes.
 9589. Q Did you ever find gas during those four years? A I did not find it myself.
 9590. Q Did you ever see him find it? A Yes.
 9591. Q Frequently? A Yes; very often, different times—a small quantity.
 9592. Q Had you an opportunity of seeing, during those four years, what effect the presence of gas had upon the flame? A Yes.
 9593. Q So it was not mere theoretical knowledge that you had? A No, just seeing it in his lamp, and his explaining it to me.

9005 Q. Now, is not there a very great difference between the condition of the Mount Kemble Mine, say, within the last month, as compared with its condition before the accident? Is it not much worse now than it was four months ago? A. Yes, and I think, generally, that it is much older too.

9007 Q. Quite apart from the entering, did not the place that took place a few months ago make a complete change in the condition of that mine? A. Yes, especially the travelling road.

9008 Q. Was not it very dusty four months ago as compared with the present day? A. Yes. Well, the travelling road never was very dusty, at the worst.

9009 Q. Which do you consider the most dusty part of that mine? A. At the present time?

9010 Q. No, say four months ago? A. That is Right. I will hold to that. I reckon it was the dustiest place that was in the mine.

9011 Q. What do you call that one opposite to it—the 4th Left? A. Yes; it was a bit dusty, too, but nothing compared with the 3th Right.

9012 Q. Just show me what you call the 3th Right on the plan? A. (Whereas passed out correctly on the plan the 3th Right and the 1st Left, as the No. 1 Mine Level Diagram.)

9013 Q. And I understand you to say that, from all your experience of the mine, the road, the 3th Right, is the dustiest part of the mine? A. Yes.

9014 Q. Would you say that this 3th Left is the next dustiest part? A. Yes, I believe it is.

9015 Q. And always has been, as far as you know? A. Yes.

9016 Q. What would you say about the depth of dust on the floor four months ago, that, as prior to the accident? Of course, it is very difficult to give an average? A. Yes, it is very difficult, because, with the horses travelling to and fro, you could not quite tell. There are some places quite bare with the horses kicking and stepping.

9017 Q. Anybody seeing it now would hardly have an idea of its dusty character four months ago? A. No, they would not.

9018 Q. You say that you find work as open lamp? A. Yes.

9019 Q. When did you do that? I understand that you have been deputy only five weeks? A. No. I have been nine weeks deputy altogether. I have been on the night shift two weeks.

9020 Q. You were four weeks on the day shift? A. Yes.

9021 Q. And was it during the day shift that you find work as open lamp? A. Yes.

9022 Q. After the disaster? A. Yes.

9023 Q. Did not that strike you as rather dangerous? Q. I did not think it was, where I was firing—in the 3th Right.

9024 Q. Because of the maining and the precautions? A. Yes.

9025 Q. Those warning precautions were not taken before the disaster? A. No.

9026 Q. What caused you to suddenly change from firing with the open lamp to firing with the wire, when you became night deputy? A. I do not know. We have just to go by instructions. There was a lamp there for me with the wire there. I do not know why they changed.

9027 Q. Were you told that as future you were to fire by the wire? A. Yes.

9028 Q. And was there no explanation? A. No.

9029 Q. No reason given to you? A. No.

9030 Q. I understood you did not go in immediately after the disaster? A. No.

9031 Q. You say you had much trouble at home? Had you, anybody beyond? A. Yes, there were two of the young fellows who were sleeping at our place in the disaster, but they were not killed.

9032 Q. And they were living in your house with you? A. Yes.

9033 Q. And they were brought home? A. Yes.

9034 Q. What were their names? A. One of them was Mansfield, and the other was Drysdale.

9035 Q. Now, may I say that you are one of the witnesses engaged and killed about the mine? A. Yes.

9036 Q. How many of the people who were in the explosion did you see when they were brought out? A. I have seen a good many of them.

9037 Q. Half a dozen, or twenty? A. About eight or ten, I think.

9038 Q. Including the two who came to your house? A. Yes.

9039 Q. Were they burnt at all? A. No, the wheeler was the only one that I can think of (who was burnt).

9040 Q. Where had they been working? A. In the 3th Left.

9041 Q. How many did you see who presented the appearance of being engaged or burnt? A. Only the one.

9042 Q. What was his name? A. Kemble Stafford.

9043 Q. Had you any doubt at the time you saw how far he had been burnt? A. Yes. Well, I should say — (interrupted).

9044 Q. I mean as far as your practical experience went in seeing things? A. I have said that he had been burnt.

9045 Q. Yes, had no doubt? A. I had no doubt he was burnt.

9046 Q. Did it give you the idea that he had been exposed to a flame? A. Well, he looked like it.

9047 Q. What colour was his skin? A. As black as a nigger, so black as could be with the dust, you know.

9048 Q. Over the skin? A. Yes.

9049 Q. And was there any dust over the face? A. Over the point of skin that came off?

9050 Q. I mean over the whole of it? A. Oh yes, he was covered with dust.

9051 Q. And it gave you the idea of dust that had been subject to fire — dust that had been burnt? A. I could not say that.

9052 Q. Did you say anything about the hair? Did you look at the hair of the wheeler? A. Yes, it was matted.

9053 Q. And the skin was hanging off both sides, but I think you said you did not know whether that was the immediate effect of the burning, or whether it had been there in taking him up? A. I could not tell that.

9054 Q. You said that the condition in the mine, which was extremely clean, depended on the direction of the wind. How did you know that? Did you ever ascertain, after it had been clean, that the wind had been in any particular direction? A. No.

9055 Q. Did you mean the wind outside? A. Yes.

Witness - W. Leitch, 21 January, 1902.

- 9535 Q What brought you to that conclusion? A That might be a saying, you know. They would say, "Oh, the wind must have changed."
- 9537 Q You have been in mines with a fan? A Yes.
- 9538 Q You have only been in two mines in your life? A No, I have been in lots of them at Home. I have only been in one here.
- 9539 Q In the twelve years at Home you were in a number. Were they all worked with fans? A No, there were men with a furnace.
- 9540 Q How long were you in the one with a furnace? A Three years.
- 9541 Q Now, with regard to the mine which you were in with the fan, at Scotland, did you ever have any suspicion of the air in there? A No, not to my knowledge.
- 9542 Q Did you in that which was worked by the furnace, in Scotland? A No, it was only a little mine.
- 9543 Q Did that work as well as the others? A Yes, just every bit. There were only about twenty men working in that mine.
- 9544 Q Well now, comparing your experience here at Mount Kenilbe with the mine you were in at Home, that do you see at Mount Kenilbe, or be as the air is concerned? A I think it is as well ventilated as any one I was in at Home.
- 9545 Q You do not pretend to know anything, I understand, about the cost of substituting a fan for a furnace? A No, I do not.
- 9546 Q It is merely, then, that, all things being equal, you would prefer a fan? A Yes, I would.
- 9547 Q You think it is more regular, I suppose? A Yes.
- 9548 Q But, as to whether you would suggest a change being made indiscriminately in all mines from furnaces to fans, you are not prepared to say? A I am not prepared to answer that.
- 9549 Q Do I understand that, whenever the steamers had stopped in the Mount Kenilbe Mine, the opening of the length of the distance up in the face of the coal has always closed it? A Yes.
- 9550 Q Have you ever had any difficulty with the draught? A Never.
- 9551 Q When you started working? A No. Whenever I wanted it I always got it.
- 9552 Q How did you learn the outlet of that daylight tunnel? Were you shown it? A Yes, I was shown it first of all.
- 9553 Q By whom? A I was working alone to it.
- 9554 Q Used you to go out that way sometimes? A Yes.
- 9555 Q Do I understand clearly from you that you were never consulted in any way as to what evidence you were to give here, until Mr. Carter and Mr. Wade saw you and asked you to make a statement? A Yes.
- 9556 Q You were never consulted in any way? A Never consulted by anyone.
- 9557 Q Did anyone know what evidence you could give, or would give? A No.
- 9558 Q Can you remember at all when you have seen the air changed in the Mount Kenilbe Mine? A No, I could not tell you.
- 9559 Q Could you tell me, for instance, whether it was a year ago or five years ago? A No, I could not give a specified time at all.
- 9560 Q Have you any reason for connecting a change in the mine's condition in the air with the westerly wind? A No.
- 9561 Q No reason whatever? A No.
- 9562 Q What do you mean when you say that you have seen it change when the furnace was not drawing? Do you mean that the furnace was not drawing an amount of the wind at the moment? A Yes.
- 9563 Q It was said that it did not draw because the wind had changed. When the furnace was not drawing, you attributed the change to some disturbance of the wind at the moment, and you attributed the closeness of the atmosphere to the furnace not drawing? A Yes.
- 9564 Q Could you tell me how long that lasted—how long as those hours? A I could not say, but it would not be at long as that.
- 9565 Q Now, where did you see those twenty workings? A I have seen them in the papers.
- 9566 Q Now, with regard to No. 4—I do not know whether you agreed what was read to you—that the waste workings should be absolutely sealed off? A Yes, I believe in that.
- 9567 Q You would make a closed book of the whole thing? A Yes.
- 9568 Q You, as a working man, think it advisable to absolutely close up a place in which there is likely to be an accumulation of gas? A Yes, I approve of that.
- 9569 Q Not to let it open on the return, and be closed in the return, but to absolutely seal it off? I want you to use what I mean. You see it might be sealed off at the part which is contiguous to the water and might be left open at the part which is next to the return airway. That is my meaning. Another scheme is to seal it off, so that anything that is inside, anything that is given off, never simply communicates. Now which of those two schemes do you recommend? A I recommend sealing it off.
- 9570 Q And you do not regard that as a possible danger? A No.
- 9571 Q You would rather seal it off than let it escape by the return airway from time to time as it accumulates? A I think it should be sealed off.
- 9572 Q What do you think would become of the gas that is inside, if there is any in it? A Well, I suppose, if there was any, when it was sealed off it would be kept in.
- 9573 Q Suppose it continued in quantity inside after it was sealed off, have you thought out what might be the effect of it? A (Witness did not answer).
- 9574 Q Have you thought much about it, now? A No, I have not.
- 9575 Q Is the measurement of air any part of the duty of a deputy, so far as you understand it? A No.
- 9576 Q And you do not pretend to understand that at all? A No.
- 9577 Q You have never been chosen as chief-deputy for a lodge? A No.
- 9578 Q I will ask you this question—suppose a mine had 200 men at it, 200 in each shift, and suppose they were using safety-lamps, so that they had 200 lamps in use, how many lamps would there be generally in the large room, and in use? A There would be 200 in use, and 200 left in the lamp-room.
- 9579 Q Would there be any part of the day in which they would all be in use, the whole 200? Take Mount Kenilbe, for instance, supposing Mount Kenilbe had 200 men and 200 lamps. Is there any part of the day at Mount Kenilbe in which the whole 200 lamps would be in use, so that there would be none left in the lamp-room? A No.

2090. Q Is there any part of the day in which both shifts would be on the mine with their lamps in Mount Kemble? A No.
2091. Q Do not the two shifts overlap at all? A The men leave the front shift and the back shift?
2092. Q Yes. A Oh, yes.
2093. Q I thought I had made my question so simple. I will repeat it. Supposing Mount Kemble had 200 men and 200 lamps. In three any part of the day in which the whole 200 lamps would be in the mine? A Yes, from the time the back shift goes in till the time the front shift comes out; all the lamps would be in use then.
2094. Q I want to know what period that covers? A From half past 8 till 2 o'clock.
2095. Q Then I understand that, even admitting the state of things I have put to you, from half past 8 in the morning till 2 o'clock, that is, five and a half hours, all the lamps would be in the mine. Are we quite sure of that? A Yes.
2096. Q Do you know anything about the lamp supply at Mount Kemble at the present time? A I could not tell you the quantity there are there.
2097. Q But all the men are using safety lamps at Mount Kemble now? A Yes.
2098. Q And during that period of five and a half hours that you have mentioned is there any surplus supply of lamps there? A Yes, there are a lot of lamps there.
2099. Q What do you call a lot? A Well, a good many.
2100. Q What do you mean by a good many? A I could not tell you the number.
2101. Q Are there two or fifty? A There are about that, say say.
2102. Q Between the two? A Yes.
2103. Q Then I understand the witness at present is confined to the 20 yards back from the face, is it not, when shots are fired? A Yes.
2104. Q And to the main workings? A Yes.
2105. Q Down to a certain point? How far from the mouth? A Right to the mouth.
2106. Q Your experience of your Manager is that he has more in command twice a week? A Yes.
2107. Q And sometimes not at all? A Yes.
2108. Q For how long? A I could not say.
2109. Q Has this extended any some years? A Yes, it is not very regular.
2110. Q Which is more often—that you do not see him in for a week, or that you see him twice a week? A That you do not see him in for a week.
2111. Q About three to one? A No.
2112. Q About two to one? A About that.
2113. Q There are about twice as many works in the year in which you do not see him as there are weeks in which you see him twice? A Yes.
2114. Q There, as regards to the Black but, I understand you to say that you do not know what a Black but is? A I have a sort of idea, but I do not exactly understand.
2115. Q I suppose you have heard talk of a practice by which the names of men who are not in favour with the Managers are handed round amongst the mine proprietors, with a sort of understanding that the men shall not be employed? A Yes, I have heard talk of that.
2116. Q Now, have you ever known of a case, in your experience of fourteen years, in which a man whom you knew to be a fairly well had failed to get work in any of the mines in the district? I am not asking you about ladies, or about people who really do not do their work, but I am talking of competent men—men whom you thought competent. Have you ever known cases in this district in which that class of men failed to get work in any of the mines here, so that you would think that there must be something going on? A I suppose that is what we would call victimized?
2117. Q Yes. A Well, I know of one.
2118. Q One that you think a competent man? A Yes.
2119. Q And he failed to get work in any mine in the district? A Whether he failed to get it in the district or not I could not say. That is going too far.
2120. Q I am not asking of a case where he failed to get into any one colliery, but where there seemed to be some sort of system by which he failed to get work in any colliery in the district? A Well, my best idea would be not to have anything to say on that, because I might be wrong.
2121. Q You would not commit yourself to any case? A No, I would not.
2122. Q No more has ever since your notice of which you could speak definitely? A No, I would not like to say that I know of any.
2123. Q I mean in such a way that you would draw some inference, and say, "There is evidently some influence at work here." You cannot tell me of a case? A No.
2124. Q And no case has come under your notice that you would commit yourself to as suggesting anything of that kind,—I suppose you talk with your fellow-miners as much as other miners? A Yes.
2125. Q And you have, too, I suppose? A Yes.
2126. Q So you have had just so good opportunities as any other miner of hearing? A Yes, just the same.

Further cross-examination by Mr. Lytton —

2127. Q What is the name of the man you were speaking of, who was victimized? A Well, I don't know what I said. I was not exactly sure.
2128. Q What was his name? A I leave it at that.
2129. Q I am asking you what was his name? A I might have been wrong.
2130. Q Perhaps you were,—what was his name?
2131. Mr. Lytton: He says he is not sure.
2132. Mr. Lytton: I want to see whether the name has been given twice or once.
2133. Mr. Lytton: He is not sure the man was victimized.
2134. Mr. Lytton: He thinks he was victimized at some colliery.
2135. Mr. Lytton: Q What colliery was he victimized at? A Kemble.
2136. Q Was it recently? A No, it long since ago.
2137. Q What was his name? A I do not think it would be right for me to say anything about it.
2138. Mr. Lytton: Q What has become of him,—what is he now, do you know? A He is sitting on the Bench, there—Mr. Justice.

Witness—W. S. Rogers, 15 January, 1903

- 1740 Mr. [unclear] Q Who is the person who assumes the safety-lamp at Kenilbe? A I am one of them.
- 1741 Q How often do you examine them? A I examine them in the morning when I put the lamp on.
- 1742 Q You might tell us what is your opinion as to the cause of the disaster? A I cannot tell you that.
- 1743 Q Now, just watch the question: do I understand that you have no opinion as to the cause of the disaster? A I have no opinion whatever, because I do not have anything about it.
- 1744 Q Do I also understand you to say that you have no theory as to what part of the mine the disaster originated in? A No.
- 1745 Q Have you found gas since the disaster? A No.
- 1746 Q Then I take it that you have never had occasion to carry the battery down up to the fan? A No, I never had need to do it yet.
- 1747 Q Then may I take it that, as far as your knowledge goes, no part of Kenilbe Mine is at present giving off any gas? A I cannot say.
- 1748 Q I say "as far as your knowledge goes" no part of Kenilbe Mine is at present giving off any gas? A Yes.
- 1749 Q You said the deputies sometimes told the deputy to do work if they had not time to do it, but you had time to do all the work appointed to you? A Yes, I have had time when I have been on it.
- 1750 Q Then what deputies did you refer to who used to tell the other to do the work when they had not time? A Mr. Dungey and Mr. Nelson.
- 1751 Q Did you ever hear Dungey tell Mr. Nelson to do the work? A No; I have heard Mr. Nelson say he would tell the night-shift deputy to put up the battery, if he had not time to do so.
- 1752 Q How often was that? A I could not say. It was not very often.
- 1753 Q Did you ever hear complaint from one deputy as to having the work of the other deputy put on him? A No, I have not.
- 1754 Q Do you give the waste workings any examination at all? A No, I do not give any examination to the waste workings—only to the working places.
- 1755 Q Since your appointment as a deputy you have not examined any waste workings in Kenilbe? A No.
- 1756 Q Do you know whether anybody else has? A Yes.
- 1757 Q Who? A Mr. Biggers and Mr. Mannam.
- 1758 Q Do you know how often they have examined the waste workings? A No.
- 1759 Q Has you have never trusted them? A No.

Examination by Mr. Robertson.—

- 2039 Q What is your district? A No. 1 Right, at the present time.
- 2040 Q Well you tell us when you go in, just describe your journey when you start in the morning—do you understand that plan? A No, I do not understand much about the plan.
- 2041 Q [The witness then, in answer to Mr. Robertson's question, pointed out in the plan that he detour examines all of the work up to the east of the No. 1 main level rope road and south of the 2nd Right rope road, including the 2nd Right. He stated that, in making his inspection, he went on the north of the main travelling road, then down the No. 1 Right Main level travelling road as far as the 2nd Right rope road, then by the 2nd Right travelling road to the nearest heading rope road, from there up to the main shaft of the 2nd Right rope road and then he inspected a number of work working places, to the west of the rope-out of a continuation of the 2nd Right rope road, not shown on the mine plan held by the Commission. From these places he returns to the main shaft, continues northward along the main out heading rope road as far as the 5th Right rope road, and then inspects each of the levels in the north of the 2nd Right rope road, walking right up and down each of these levels. After inspecting the workmen of these levels (No. 30), he goes back to the eastern end of the 2nd Right rope road, and then walks through the 2nd Right rope road—inspecting it—in Adam's Wheel, and then back by the travelling road to where he starts from.]
- 2042 Q What time do you start to make your examination for the morning shift? A 2.45.
- 2043 Q When you said you had the No. 1 District, I understood you had the whole of the District? A No.
- 2044 Mr. [unclear] Q What about the western side of the No. 1 District? A It is not working.
- 2045 Mr. [unclear] Q Is making your inspection, if you had any place showing, not being worked, in the middle of your district, would you examine that place? A Yes.
- 2046 Q Is there any rule to that effect? A No, I was just told that I was to examine it—to go into it—because they do not know but what there might be some working in it the next morning.
- 2047 Q Supposing you found a place closed off, where you knew there were no men working, would you pass that place? A No, I go into it.
- 2048 Q If there are two or three places in your District? A I go into them all, and do the lot of them.
- 2049 Q Were you ordered to do that? A Well, I never got any authority to do so, but I expected that it was part of my duty, although they never told me so.
- 2050 Q You thought so yourself? A Yes.
- 2051 Q But you were never instructed to do it? A No.
- 2052 Q And there is no special rule requiring you to do so? A No, I do not think so, not that I know of.
- 2053 Q What description of lamp do you use for making an inspection? A Just the ordinary lamp that they use down at the mine.
- 2054 Q But when it used at the mine—do these of these lamps? A I do not know it by name.
- 2055 Q Have the deputies any special lamps? A Yes; there are the short-long lamps. I think it is a Derry lamp that I have got there.
- 2056 Q You know what a Derry lamp is? A It is one of them I have got.
- 2057 Q With a glass and no glass? A Yes, the glass is on it too.
- 2058 Q It has a glass all the way? A Yes.
- 2059 Q And it is surrounded with a glass that you slip up when you want to blow a shot? A Yes.
- 2060 Q Well, of course, with that lamp you cannot find any indication of gas below $\frac{3}{4}$ per cent? A No.

8761 Q But there are other lamps with which you might easily detect less than 21 per cent. You do not know anything about the hydrogen lamp? A No.

8762 Q You recommended that a test is made with the hydrogen lamp regularly? A I do not know anything about that. I have never even heard of it before.

8763 Q You have no idea at the time it refers to make a test with the hydrogen lamp? A No.

8764 Q Not the test of making it? A No.

8765 Q Then, may I ask why, knowing nothing about the hydrogen lamp, you so confidently recommended this statement? A Well, the hydrogen lamp?

8766 Q Yes? A Well, it is just through hearing them talk about it, you know.

8767 Q You also recommended weekly measurements of the air in each shaft? A Yes.

8768 Q Do you know that the measurements, although they may not be made weekly, are made in each shaft at present? A Yes, they might. I do not know.

8769 Q Now, you know that the Act provides for adequate ventilation being supplied. I suppose you have read the Coal Mines Act? A Yes, I have read part of it.

8770 Q What have you read? Have you read the general rules? A Yes, I have read part of the general rules. I have never read much of it.

8771 Q It says, "An adequate amount of ventilation shall be constantly maintained in every mine, to dilute and render harmless noxious gases to such an extent that the working places of the shafts, in the stables, and workings of the mine, and the travelling roads to and from these working places, shall be in a state free from working and passing thereto." Now, is it not possible to see that the working places, and roads, and levels are adequately ventilated? A Yes.

8772 Q And if you find them adequately ventilated, in what way could a measurement of the air assist you in your duties? A I do not know.

8773 Q Would it be of any assistance at all to you? A I do not think it would be of much assistance to me.

8774 Q Then, so far as you are concerned, and as far as the miners are concerned, it is absolutely unnecessary? A It is not the main thing to adequately ventilate the working places and other parts of the mine? A Yes.

8775 Q Now, you recommended that the travelling roads and haulage ways should be wetted,—what is your reason for making this recommendation? A Just for keeping down dust, or anything like that.

8776 Q Is it a matter of comfort and convenience in working? A There is not much comfort in it, but just for safety and that kind of thing.

8777 Q For safety? A Yes.

8778 Q But then you said, further on in your evidence, that there was no concern to water the working places near that 28 yards from where a shot was to be fired? A Yes, I said that.

8779 Q Well, what danger do you apprehend from that point about shots? A I do not know how much as all. It is only for a trifling shot.

8780 Q But, if the place is the vicinity of where a shot is to be fired, are sufficiently saturated with water, it is, humanly speaking, impossible for an explosion to extend beyond? A No, you think so? A Yes, I think so myself.

8781 Q Now, about the matter of detecting gas—I suppose it is not a very difficult question to detect gas with intelligent men could do it? A Well, as far as I have seen it, there was not much trouble in detecting it if it was there.

8782 Q Do you not think any intelligent man could learn to detect gas, in his experience as a miner? A I should think he could.

8783 Q Then a knowledge of the chemistry of the gas you are detecting would not be of very much assistance to you in your present duties? A Do you think it would help you at all in your duties to detect if you knew the chemistry of gases? A Well, I do not know what "chemistry" means at all.

8784 Q Do you think it would help you to detect gas? A I do not think it would help me to detect it.

8785 Q Or would it assist you in any way to get rid of it when you did find it? A I do not think so.

8786 Q How many holes did you see? A About eight or ten; I could not give you the total number, but it would be about that.

8787 Q As a matter of fact you do not know anything about the existence of manacles of the kind that were found? A No.

8788 Q Now, this Bedford, who was black with dust—would not he be black under ordinary circumstances? A Yes.

8789 Q Was he any blinder on this occasion? A Yes.

8790 Q Now, for anything you know, the darkness in the ventilation may have been caused by something else than excessive darkness? A It is possible. It was just as I said—that you want was so.

8791 Q The furnace was, might have gone to sleep, or he might be lay? A Yes, there could be a lot of it or he lay.

8792 Q You recommended that waste workings be sealed off absolutely. Do you not think that it would be a preferable plan to ventilate waste workings? A Well, it would drive the gas out if there were any there—there is no mistake about that.

8793 Q I mean, if you cannot get the air into the centre of a waste, you can ventilate along the edge, and that is nearly preferable to sealing it up? A Yes, you tell me how you would seal off waste workings?

A It would be a very difficult job to seal them off.

8794 Q But how could you do it when you are in the act of taking out the pillars—and that is constantly being done? A Yes, you would have to take the heading and seal it off.

8795 Q Well then, your working places would actually be in the waste workings? A Yes.

8796 Q You could not seal it off unless it was an abandoned district, because, in the act of taking out the pillars, you must necessarily be in contact with the waste? A Yes.

8797 Q So it could only be in the case of an abandoned working that you could possibly seal off the waste. Now, with reference to the Manager's work—for anything you know the Manager may have been visiting other districts and other men two or three times which he did not visit you at all? A Yes, that is quite true.

8798 Q The Manager, in point of fact, will go where he is most wanted? A Yes, that is quite true.

8799 Q Probably, if there is nothing very unusual or important in your place, he might leave it, and go to places of more importance? A Yes, I only speak personally of that. I do not know how often he might be going to other places.

Continued

Examination by Mr. Higginson.

- 9300 Q Who examines the left-hand side of the Mine No. 1 Right? A Higginson.
 9301 Q The part that is not working at present? A Yes.
 9302 Q Is that examined only, do you know? A Not every day.
 9303 Q How often is it examined? A I think it is once or three times a week.
 9304 Q And if you make the examinations which you have described, do you notice that in a book in the room? A Yes.
 9305 Q Is this entering done before the men go in? A Yes.
 9306 Q And you have a system of books which you give? A Yes.
 9307 Q You do not use the words "all right" before the report is written, and allow them to pass on? A No.
 9308 Mr. Howe: Mr. Bruce Smith, there is a question I would suggest to you, as to the relative distances of the 5th Right before and after the explosion, and of the 4th Left. I would suggest that you might ask standing as to the relative distances of these two roads.

Further examination by Mr. Bruce Smith.

- 9309 Q Did you just before the explosion, say in June—the explosion was at the end of July. How far the distances of the 5th Right compare with the distances of the 4th Left, which, after all, was a re-examination of the mine road? A About before the disaster which was the mine road, the 4th Left is the 5th Right? A I think the 5th Right would be the disaster.
 9310 Q Were they more dusty before the disaster than they are now? A I could not exactly say that before the disaster, because I was not working in the 4th Left before the disaster, I was in the 5th Right before the disaster.
 9311 Q But you have told me generally? A That it was a dusty district.
 9312 Q But I have understood you to say generally that, before these late heavy rains, the mine generally was much drier than afterwards? A Yes, it was.
 9313 Q I think it is necessary for the Commission to know that. That the effect of these late heavy rains was very noticeable upon the whole mine. I mean they were more so than at any other time, and constant everything? A Yes, the part of a section where I was walking about—it took effect on that.
 9314 Q What district was that? A 5th Right and 7th Right.
 9315 Q It made a complete difference in the appearance of the mine? A Yes.
 9316 Q Well, that dry weather, which existed before these late rains, oriented back to before the disaster—did it not? A Yes.
 9317 Q So I may take it from you that there is a very considerable difference in the dryness of the mine before the disaster as compared with the present time? A Oh, yes, there is that.
 9318 Q I want to ask a question with reference to one asked by Mr. Robertson. Mr. Robertson asked you did you go up behind the fence? and you said you had never been told to do it? A Yes.
 9319 Q Now, did you know that, by this special rule No. 10, it was your duty to "Make a true report of, and enter and give order, as a book kept at the appointed office for the purpose, the state of the mine roads, doors, stoppage, barriers, fences"—not "working holes," but "doors and barriers"? Now, could you examine the barriers up to the end of, say, No. 1 Main Tunnel, without going behind the fence? A Not without going behind the fence.
 9320 Q To examine all those barriers you must go behind the fence? A Yes.
 9321 Mr. Robertson: But further on in that rule it says "and shall satisfactorily, during his shift, inspect the working faces, doors, doors, barriers, and ventilating appliances." A Yes.
 9322 Mr. Bruce Smith: I know that, but before that rule "faces" not "working faces." I also want to point out that it says "he" and you will notice that the "he" follows upon rule No. 8, which is the rule for the foreman—well, the "he" cannot mean the foreman, of course.
 9323 Mr. Robertson: Well, in the same way, there is an obligation upon him to examine the workings, the state of the mine roads, and so on.
 9324 Mr. Bruce Smith: Q "The mine roads"—that you did. "The doors"—that you did? A Yes.
 9325 Q "The stoppages and the barriers"? A Yes.
 9326 Q And you classified in me that you could not examine the barriers behind the fence without going up to the barrier through the fence? A No.
 9327 Q And the fence—I am not talking of the working faces, but the fence—you could not examine the fence behind the fence without going through the fence? A That is true.
 9328 Q And it says "He shall also make a true report of the state of the mine roads, doors, stoppages, barriers, faces, and ventilating appliances." You could not do that without going behind the fence? A No.
 9329 Q And, therefore, without any verbal directions from the management, your special rules required you to go behind the fence? A Yes, those are my duties.
 9330 Q Besides that, I want to ask you, now, though work is stopped in these places, is it not necessary to examine them? A We do it, at any rate.
 9331 Mr. Bruce Smith: I only ask that because he seemed to be under the impression that he had no instructions to do this.
 9332 Mr. Robertson: You see you must also read No. 13, and, according to that interpretation of No. 9, there was an obligation on him to examine every part of the mine every day.
 9333 Mr. Bruce Smith: Yes.
 9334 Mr. Robertson: Then, what is No. 10 for?
 9335 Mr. Bruce Smith: I do not undertake to interpret all these. It is additional, it is cumulative only, and, it repeats what it is really cumulative. I suppose he had said he had examined behind the fence, although he had never been instructed to do so. I only wanted to point out, to be that, from the departmental point of view, he was instructed to do that, and that he is rapidly instructed by these special rules, which he ought to have at his finger's end.
 9336 Mr. Howe: It looks very much as if the special rule applied to the reporting on the examination, which he is expected to make afterwards—"He shall make a true report of the state of the mine roads"—it is a question whether that means the state of the mine roads, or the state of the mine, but I suppose it means the state of the mine roads—"doors, stoppages, barriers, faces, and ventilating appliances."

appliance", and then, afterwards, "He shall constantly, during his shift, except the working time, outside, down, location, and working appliances." Well, it looks like very much as if the "there" mentioned in the second line of the rule were intended to be the same place, the working face; because in the next rule it says that he shall, at least once in every week, examine the waste workings.

Q897. Mr. Bruce Smith? Your Honor says that he must enter in a book, daily a report of, among other things, the location and the hours. He cannot enter them daily unless he goes there daily. Therefore he must go daily the location and the hours, and, of the face and the location he holds in the face, he must go (1897) he takes daily in order to see them daily and report daily. Then, in addition to reporting daily, the rule goes on to say that he must be continuously moving about.

If the Commission came to the conclusion that it is desirable that these faces should be examined, it might be advisable to require the shift by adding some other words.

Q898. Mr. Robertson? I might say that I know of one place where, in miners that don't, there is a similar rule that the location shall examine each place.

Q899. Mr. Bruce Smith? You know it did come up at the request, in Mr. Rogers' evidence, that that was very extreme and the end of No. 3 Main Level had not been examined for some days. I do not know whether the Commission knew that, but, as it is before the Court, I will refer you, for a moment, to the page. On page 62 (Inquest deposition), about two thirds of the way down, Mr. Rogers says—

"Miners impaled up to the face at the very end of No. 1 Night. No one would examine the two faces right up to the end of No. 1 Night on the morning of the 21st July. The faces at No. 30 and 40 yards from the entrance had been 30 or 40 yards and not as far as the end of the 21st July by anyone. I do not say that that part of the work is the highest or the same. From No. 1 Night up to the second underground there would be a man of about 1 to 20, the very end of No. 1 Night would be 20 or 30 feet higher than the part of No. 2 Night. . . . There was no man at all not keeping the 30 or 40 yards beyond the face at the top of No. 1 Night; and that there were no men working there."

Q900. Mr. Robertson? Yes, that is it. That is the ordinary position in most mines.

Q901. Mr. Bruce Smith? Then, on page 62, what your mind is to that, from six feet from the end of the first paragraph—

"The face at the top of No. 1 Night was not there because there was no one working up there. The testimony was upon the fact of that place, I saw it there myself some weeks before the disaster. The air would go from where there was working up into the out-draw, and to the place where Powell was working."

Then, compare that with the fact given by Mr. Almon in his evidence, that he found a quantity of gas up in the very old mine.

Q902. Mr. Robertson? But I understood that he found it with a hydrogen lamp.

Q903. Mr. Bruce Smith? But he found a large quantity. He gave the measurement. He found a large quantity with the ordinary safety lamp.

Q904. Mr. Robertson? But that was after the test was damaged.

Q905. Mr. Bruce Smith? Yes, but it was a cut-down, and 2 points in the necessity, I think, for leaving those places, even though men are withdrawn.

Q906. Mr. Robertson? I quite agree.

Q907. Mr. Bruce Smith? I do think it may be necessary to make that clear, if it is not clear now.

Q908. Mr. Robertson? That is the reason I asked the question.

[Witness retired.]

HENRY JUDH was sworn, and examined to tender—

[The witness was called by the Commission, who asked Mr. Bruce Smith, as a matter of convenience, to conduct his examination of that?]

Examination in-chief by Mr. Bruce Smith—

Q909. Q. What is your name? A. Henry Judh.

Q910. Q. What are you? A. I am messenger and messenger now at Kilm.

Q911. Q. And how long have you occupied that post? A. About five months.

Q912. Q. What were you before you occupied that position? A. I was deputy overseer.

Q913. Q. How long have you been in the Mount Kilm Mine? A. About twenty-seven years.

Q914. Q. You know Glasgow? A. Yes.

Q915. Q. There are two Glasgows, are not there? A. There are several.

Q916. Q. You know P. Glasgow? A. Yes, Pat.

Q917. Q. Have you heard of some evidence that was given by Patrick Glasgow? A. Yes; I saw it.

Q918. Q. Where did you see it? A. In the newspaper.

Q919. Q. What did you see in the newspaper? A. It was about lighting some gas.

Q920. Q. Did you see that your name was brought into it? A. Yes, I saw that much.

Q921. Q. I will just read you the part, and then I will hear what you like to say about it—

"Q. Now, have you any recollection of discovering gas at any time in Mount Kilm? A. Yes.

"Q. Give us particulars of each occasion? A. The last time I found it was after firing a shot.

"Q. When? A. Oh, it would be about six or seven weeks ago.

Then was shot on the 21st of January. Then he goes on to say—

"Q. What part of the mine? A. In the place we called the Old Straght.

"Q. What number? A. The number of the place we worked in was No. 26, but this was in another place. We had turned away over like to where we working a cut-through, driving into the heading where I was working.

"Q. Who was your name? A. My brother, Alfred Glasgow.

"Q. What happened? A. I had had a moment about the day before, and, of course, I had to come out. The next morning I went in, and I heard another hole about a foot or a little more away, and after the shot went off there was a little fire and noise, and, of course, the flash came out.

"Q. How far did the flash come out? A. Well, I suppose the cut through was in about 7 or 8 yards. I was away up the bore.

"Q. Where did the flash come out? A. Into the hole where I look away from." (189-201.)

"Q. What

1010. Q. Here you have a "composition" from the man who has been assistant manager?

A. Not that I can remember; but I think I have heard of it. I have not heard of it since then.

1011. Q. But have you before that? A. I do not know. It is more than half a century.

1012. Q. They have had a "composition" from the man who has been assistant manager?

A. And in every case, I think I should say that it was from the gas powder. A. From the blasting powder.

From examination by Mr. Loughton.

1013. Q. Can you show me up where it fairly has authority you speak of for gas coming from powder?

A. I think so.

1014. Mr. Bruce Smith: Q. Look at page 120; perhaps that is what you are referring to? A. It is on page 125.

1015. Mr. Loughton: Q. Just read out the passage you refer to? A. Composition of gas given off by burning powder when fired: carbon monoxide 74.75, hydrogen sulphide 7.50, hydrogen 2.24, methane 2.06, and a total of sulphure gases of 4.44 per cent.

1016. Q. That is what you referred to? A. Yes.

1017. Q. And that is all you referred to? A. That is all I referred to.

1018. Q. Now, what sort of powder was being used in Kew? A. The usual blasting powder, compressed blasting powder.

1019. Q. Now, tell me this, in what paper did you read the statement you complained of? A. It was in the Telegraph when I was at Kew.

1020. Q. You read it there? A. Yes.

1021. Q. Did the Manager speak to you about these statements? A. He drew my attention to the report; he asked me how far it was correct.

1022. Q. Then you saw the report through the Manager's drawing your attention to it? A. I saw it in the Telegraph first, but went to Sydney. That is the first I knew of it.

1023. Q. Then when did the Manager draw your attention to it? A. On Saturday, the first day I was at work.

1024. Q. What was in the report that you complained of? A. That the Gloucester did not give a correct statement.

1025. Q. In what language was the statement incorrect? A. In the first instance, he said I said there was nothing worth mentioning at the old hole. I never said such a thing.

1026. Q. Is that all you complained of? A. That is one.

1027. Q. And what else? A. Then he says that the Gloucester did not say that I said I was at Kew. I said I was at Kew, but I did not say that I was at Kew. I said I was at Kew, but I did not say that I was at Kew.

1028. Q. And that is the reason you complain of that? A. Yes.

1029. Q. And you were not there, and you did not know how far it was? A. I do not know.

1030. Q. Then how had you anything to complain of, so far as you were concerned? A. Because it was saying it appears that I was a little bit slow in finding it.

1031. Q. And I suppose you have had a conversation with Mr. Jones as to the evidence that you should give here? A. No, I did not.

1032. Q. Did not you a conversation with Mr. Jones? A. He told me that I was to come here.

1033. Q. I think you have a certificate by examination? A. I applied to come.

1034. Q. What certificate? A. A certificate under my own certificate.

1035. Q. And you are now under-estimating at Mount Kew? A. No, I am entitled to the same manager.

1036. Q. Who is the under-estimator? A. Mr. Phillips.

1037. Q. May he be a certificate? A. Yes.

1038. Q. By examination? A. By service.

1039. Q. How long have you worked in Kew? A. Since 1880, more or less.

1040. Q. And during that time how often have you known the air to be reversed by a westerly wind? A. I could not say.

1041. Q. Roughly? A. The air has not been reversed in the last three years.

1042. Q. Roughly, say you may have when it has been reversed during that period? A. I could not say.

1043. Q. Give me some approximations to number of times,—give me 100, or 200, or anything possible? A. I could not.

1044. Q. Do you know of any other cases, local, of the westerly wind, reversing the air in Kew? A. No.

1045. Q. Did you read the evidence given by Mr. Donald? A. No, I did not.

1046. Q. Did you read that part of the evidence where he spoke of smoke remaining in the working place all night? A. Yes, I saw that.

1047. Q. Are you prepared to say that it is not true? A. I was not there, it was not my work.

1048. Q. You do not know anything about it? A. No.

1049. Q. Have you known smoke to remain in your shaft in any working place all night? A. No; not the same smoke.

1050. Q. What sort of smoke did remain? A. Well, if you start all round a sort of workings, and they are firing shots all through, there is a sort of smoke coming through.

1051. Q. The same smoke would remain in the place all night? A. No.

1052. Q. Has there not been smoke in one place all night? A. No.

1053. Q. Is the air good? A. Yes.

1054. Q. Do you think it is sufficient for all places in the mine? A. I do.

1055. Q. Then, tell me why you are putting that tunnel in, to put in a fan? A. To improve the ventilation.

1056. Q. Then it is not good enough? A. It is good enough, but we want to improve it.

1057. Q. As a matter of fact, there are tunnels here called for the construction of a tunnel, to put up a fan at Kew? A. I do not know.

1058. Q. Then, what did you tell me that they were putting up a tunnel here for the fan? A. They have not started yet. They are not going to erect a tunnel, they are going to erect a shaft, I understand, but they are not prepared yet.

10055. Q On the last occasion in January in considerable quantity? A No, there was just a slight flow from a civil hole.

10056. Q In view of the fact that since the Mount Kemble disaster gas has been discovered, and that Glenon says that there was no smoke from the powder when he lit it, would it be right to assume that the flame was simply from the powder? A I don't think that Glenon says there was no smoke.

10057. Q Yes? A He did not tell me that.

10058. Q If I told you that was so now you said prepared that it was gas from the powder? Now, here is the question which was asked of Patrick Glenon—

"Q Did Mr. Donald say anything? A Well, of course, J. J. J. answered W. He said it was smoke from the shot, but there was no smoke there. The smoke had gone when it lit.

"Q When J. J. J. told you it was smoke from the shot you knew there was no smoke there when it lit? A Oh I am outside."

Q Do you still adhere to the opinion that it was gas from the powder that lit up? A I am still of opinion that the gas from the powder was mixed with it, if there was a small percentage of gas.

10059. Q With you admit that there was a small percentage of fire-damp coming from the coal? A I cannot say, I could not find any.

10060. Q You are not prepared to say that it was all from the powder? A I told him that it was from the powder.

10061. Q You said "flame" and did not mention gas at all? A No, I did not mention gas.

10062. Q Did you have looking for gas before the Mount Kemble explosion? A I have been looking for gas for the last six years. I have been looking for it every morning and every day that I have been at work as a deputy.

10063. Q With a safety lamp? A Yes.

10064. Q And you never discovered any trace of fire-damp excepting during the last six months? A That would be the last six months.

10065. Q Are you working in galleries and at the present? A No.

10066. Q Now that gas is being constantly found there, is it safe to work in the mine with naked lights? A Yes.

10067. Q And do you water the travelling roads there? A Yes, all of the main roads.

10068. Q And in the vicinity of where you are going to live a shaft? A Yes, when the place is dry.

10069. Q What does it? A In places where there is no gas, the water is used.

10070. Q Have often have you, as deputy, fired a shot? A I have not been a deputy.

10071. Q Have often? A I cannot say.

10072. Q Regularly speaking? A The deputy is not always there, but he is there before the light is put out the first time.

10073. Q Do you not know that there may be a dangerous quantity of gas there? A What about the gas working with naked lights?

10074. Q Do you not know that there may be a lot of gas there although it may not have been discovered? A I do not think it is dangerous if the place is wet.

10075. Q If a man wanted a shot fired in a dusty place, and gas had not been discovered there, did you water that place? A We watered all places if they were dry.

10076. Q What I ask you is, if a man wanted a shot fired in a dusty place, and gas had not been found in that place, did you water it? A If the place was dry we watered it.

10077. Q Can you tell me any places which have been watered where gas has not been discovered? A I would not mention them by name.

10078. Q Do you know of a single place? A All working places that are dry are watered before a shot is fired.

10079. Q How do you water them? A By splashing the water out of a bucket.

10080. Q Have you any appliances to test the water up there? A We take it up in a watering tub from a cask standing in the east.

10081. Q Do you know, within the last six months, of any working places which have been splashed with water from buckets or tubs? A Yes.

10082. Q Did you water the place where Glenon was working? A It is damp there. We do not water that side of the mine as all.

10083. Q I was asking you about that thought. You have driven for about 50 yards without a cut through? A That would be about the distance.

10084. Q In your opinion what would be about the proper distance to drive without a cut through? A It depends upon the water there. We can drive some places 30 yards, and other places for 50 yards equally as well.

10085. Is 30 yards a reasonable distance to have cut through apart from each other? A I should say 25 or 30 yards is a reasonable distance. But we have peculiar conditions in our mine, so we may drive into a place where the mine is cut off and where it is all solid, it is better to give an one or two yards extra in such cases.

10086. Q You would not have a drive more than 60 yards in length without a cut through? A I would not make a hard and fast rule. As long as you can get ventilation, it is all right.

10087. Q Do you not see the danger of the air supply being cut off from the men? A There is always danger in a mine.

10088. Q Do you not see that the bottom may become damaged and leave the men without any air 40 yards away? A You would do that in a distance of 20 yards away.

10089. Q But it is not a greater danger? A Not necessarily so.

10090. Q Do you not admit that there is a danger that the bottom may become damaged, and that the men may be left without air 50 yards away? A There is no equal danger if the men are only 30 yards away.

10091. Q You would not have cut through 30 yards from each other in a reasonable distance? A I would not make a hard and fast rule.

10092. Q What rule would you go by? A I would get the ventilation into the working places.

10093. Q And you would drive for 100 yards without a cut through? A Yes, if there was plenty of pressure, so far as ventilation is concerned.

Witness—E. J. J. 21st January, 1905

10041. Q Have you got that at Kew? A No, not in all the places. I do not recommend that any distance should be 60 yards apart in all places. What I say is, that we can place in some places for a distance of 60 yards equally as well as we can in other places for a distance of 30 yards.
10042. Q Tell me what you think of these recommendations. No. 3.—“Manager, under manager, deputies, and others there, to hold certificates of competency by examination, and to have had five years practical mining experience for responsible positions.” A Yes, I would approve of that.
10043. Q Recommendation No. 4.—“Inspection to be carried with absolute power in order to see of safety-lamps.” A I do not believe in that.
10044. Q You know what it means. If the Chief Government Inspector anticipates danger in a mine from the use of a new light, he is to have power to order safety lamps to be put in. Do you not think that is a proper power for him to have? A I think that the Manager should know more about the matter than the Inspector, who only visits the mine once a month.
10045. Q But if the Manager has no power to put them in owing to the progress of the mine, should the Inspector, who do you think should have the power of ordering them to be put in? A The Manager has the power now.
10046. Q I am putting a case to you, where a Manager may desire safety lamps to be put in, but the proprietors will not agree because of the expense? A Any Manager would resign his position if lamps were not put in a mine when he thought that they ought to be.
10047. Q What is the objection to the Inspectors having that power? A Because he does not know the local conditions affecting the mine.
10048. Q Can he get over these conditions? A He is not there every day.
10049. Q Cannot he see the danger as well as the Manager? A I do not think so.
10050. Q Would he not be likely to see the danger? A I think that the Inspector can make that recommendation now to the Manager.
10051. Q Do you think that is sufficient? A Yes. If an Inspector sees danger he can stop the working of the mine until the danger is removed. Is not that good enough?
10052. Q That is the view you take of it? A That is the view I take of it.
10053. Q Recommendation No. 5.—“Prohibition by law of gasproofing, and free substitution.” What do you think of that proposition? A What long would you give them to make the change?
10054. Q I would have that to the Commissioners. I have no doubt that reasonable time would be given to the management to make the change? A I believe myself that a few is the best.
10055. Q We all know that. We are talking about the future. What time would you give the collieries to substitute flame for furnace? A Suppose we have a case where it would not pay to have a fan?
10056. Q I am not arguing with you,—what time would you give the management to substitute flame for furnace? A I would not make a recommendation for a fan and hot air to be put in.
10057. Q What substitution would you give of the view? A The Manager is responsible for the working of the mine and for the safety of the men. Is that not enough?
10058. Q No, it is not enough. Let me put this to you. Mr. Hagan was responsible for the working of the Harrow Colliery, and some safety men were killed. Do you know that Mr. Hagan selected that he knew nothing about gas? A I do not know anything about it.
10059. Q If a Manager said that he knew nothing about gas, and that he had never taken a measurement in the colliery, would he be fit to have that position? A That is not my business.
10060. Q Well, now what are your objections to having free removal of furnace? A I suppose of having fans.
10061. Q What time would you give for the fans to be substituted? A I would not make any hard and fast rule.
10062. Q I ask what in your opinion would be a reasonable time? A
10063. A Mr. Hagan? The answer, which would be a satisfactory to the witness’ former answer is “sufficient,” because he says that he does not think that the change should be made compulsory at all.
10064. A Mr. Hagan? Q Well you admit, then, that at Kew the furnace has, at times, been found to be defective? A Some years ago it was, I believe, but it has been repaired a lot since then.
10065. Q Is it not proposed, in addition to strengthening the mine with a fan, also to make an independent shaft for the lowering of timber and stuff to the mine? A Not necessarily. The shaft is to be an open shaft. Only one shaft is to be made.
10066. Q Do you say that the proposal is to have one shaft only? A One shaft for the open. We have another already.
10067. Q Do you know exactly what they are going to build? A It is not my business.
10068. Q Recommendation No. 4.—“Waste workings to be absolutely sealed up and surrounded by return airways (for less of mine), such return airways not to come in contact with intake.” A I do not believe in sealing up waste workings.
10069. Q What would you do? A I would connect them with return airways.
10070. Q What about the intake? A I would allow a certain quantity of air to go through to keep the water out.
10071. Q That would not be the intake carry any quantity of hot air to the working place? Q If you have sufficient ventilation, you can do what you like with it.
10072. Q You would not have the intake connected with the waste? A Certainly not.
10073. Q You would allow the intake air? A Yes, as far as possible. When you have finished with the ventilation for the workings, you can do what you like with it.
10074. Q Recommendation No. 6.—“Inspection with locked safety-lamps in all mines.” A The decision remains with a locked safety lamp every morning.
10075. Q Recommendation No. 7.—“That a monthly examination and report should be made by deputies and District Inspector with the Hydrogen flame.” A I do not think that it would be bad.
10076. Q Do you think it would be good? A I think it would.
10077. Q You know that the object is to discover gas that is per cent of gas? A Yes, I know that.
10078. Q I am asking you now? A I do not suppose it could be said.
10079. Q Do you suggest it, have you any reason for not suggesting it,—are you afraid of suggesting it? A I am not afraid of suggesting it.

- 10064 Q I will now come to Recommendation No. 11.—“Worthy recommendation of air in each section, and report thereof sent to Inspector.” A Yes, we do that now. We report it.
- 10065 Q To the Inspector? A He is always for him to look at what he knows.
- 10066 Q You do not make the Inspector every week? A We are not compelled to do so.
- 10067 Q Would you do it every week? A I usually do it myself.
- 10068 Q Would you make it compulsory? A I would not make it compulsory. The Coal Mines Act says every month.
- 10069 Q Where is the objection to making it compulsory? A I do not say I object to it, but I do not think I approve of it.
- 10070 Q Do you know of any objection? A I am not going to object to it.
- 10071 Q What is the objection? A You would make it a bad and bad rule, but there may not be time to do it.
- 10072 Q Do you know of any objection to a being done? A I do not know any objection to it.
- 10073 Q Recommendation No. 12.—“An extra supply of safety lamps and their requisites, equal to one-third of the number of persons employed below ground, to be kept constantly in good order and ready for use.” A I do not think it had to have a supply of lamps ready.
- 10074 Q Have you got them ready at Kew? A Yes.
- 10075 Q Have many? A I cannot say.
- 10076 Q Roughly speaking? A I have no idea.
- 10077 Q Have you no idea, as matter of course, of the number of lamps which would be ready in case of disaster? A I could get a list ready at a couple of hours notice.
- 10078 Q Have you no idea as to what number would be available? A I have never counted them.
- 10079 Q Have you any approximate idea? A I have not. I know there are lamps ready.
- 10080 Q Would you support the recommendation that a number of lamps should be kept? A We have had lamps for four years.
- 10081 Q Would you approve of that recommendation? A I do not know whether I would make it compulsory as to the number. I would like some safety lamps to be kept ready. We always do it.
- 10082 Q Did you come to the Mount Kemble disaster? A I did come to Kew.
- 10083 Q The same evening? A No.
- 10084 Q The day following? A Yes.
- 10085 Q Did you hear that there was a deficiency of lamps at Kew? A I do not know anything about it.
- 10086 Q There were some brought from Kew, I think? A Yes, I think some were carried over.
- 10087 Q Was your pit working on that day? A The pit worked until 5 o'clock.
- 10088 Q You know of the disaster about 10 past 5 o'clock? A We did not. It was 5 o'clock when I left the mine, and there was no word then.
- 10089 Q Recommendation No. 13.—“Traveling and baggage roads and other places necessary to be properly watched.” A Yes, we do that.
- 10090 Q Recommendation No. 14.—“Managers compelled to give some personal time and attention to management of safety.” A It all depends on the time which they are giving me.
- 10091 Q What does your Manager do now? A He is at the pit four hours a week.
- 10092 Q How often does he go outside? A Two or three times a week, but I cannot give you the stated number. If there is anything fresh he goes in some other.
- 10093 Q Recommendation No. 15.—“That the size of the machines should be enlarged.” What is the size of the machines at Kew? A Some 2 feet by 4 feet, and some 3 feet by 6 feet.
- 10094 Q You know that the statute requires them to be 2 feet by 4 feet? A Yes.
- 10095 Q Do you think it necessary to have them larger? A No, there is no particular reason, but when we were making them it was just as easy to make them a foot larger.
- 10096 Q Would you have them 4 feet wide and 6 feet deep? A I believe they are big enough at Kew, as we have them now.
- 10097 Q Recommendation No. 16.—“Provision to be given regularly to employees on the scene of escape.” A Would the men make any use of it?
- 10098 Q Do you approve of the recommendation? A I do not think it is a bad one, but it would be like talking to a stone wall in many cases.
- 10099 Q You can only speak as to Kew, I suppose? A Only as to Kew.
- 10100 Q Have you ever known any man refuse to be shown a way out? A I do not think I have tried them.
- 10101 Q Then when reason has been put forward that it would be like talking to a stone wall? A Because some of the men were so badly that they were not in a position to.
- 10102 Q Then is it a necessary thing that they should be shown their way out? A Of course it is.
- 10103 Q What is it a question of? A What would you make it necessary to show them?
- 10104 Q All possible escapes? A We have them already.
- 10105 Q Would it be any trouble to show them to the men? A They know them.
- 10106 Q Are the men not prohibited from standing outside their working places? A Yes.
- 10107 Q Would they not have to get permission to travel? A Of course they would, when it was a case of accident.
- 10108 Q Would it not be well to have the men instructed as to a question? A I believe it would.
- 10109 Q Would you have any objection to allowing your deputy to do that? A Not at all.
- 10110 Q Do you think it is right to do it? A Of the men was it?
- 10111 Q Recommendation No. 17.—“Safety lamps should not be collected for dust firing.” Is your safety lamp the one with a wick light? A Yes, with a wick light.
- 10112 Q I would not say this. Is a case where you have been discovered and it was necessary to use a safety lamp, would it be dangerous to even a safety lamp to fire a fuse? A I would not approve of doing that.

Examined by Mr. Deane Smith—

- 10113 Q You have the same year lately used for a first-class certificate? A Yes.
- 10114 Q You have allowed yourself lately for a first-class certificate? A Yes.
- 10115 Q You have been up the post recommendation? A I have been up there three or four times.
- 10116 Q Did you feel there? A I felt there in the mine.
- 10117 Q You do not know whether you have succeeded? A I do not know yet.

Witness—H. J. J. 25 January, 1909

- 10138 Q Have you changed your opinion at all as to these pointed question since you were a working man? A Which questions?
- 10139 Q As to whether men should separate lanterns, or whether a certain number of lamps should be kept at a mine, and so on? A I always approved of laws before lantern legislation.
- 10140 Q Were I mean to, has your mind undergone any change since you were a working man? A Not on that point.
- 10141 Q I understood that, the condition of things being equal, you would prefer laws as a means of preventing? A Yes.
- 10142 Q But you do not recommend that a mine should be suddenly equipped, irrespective of conditions, to make a change? A No.
- 10143 Q Are you a reader of mining literature outside of what you read for your examination? A I read everything that I can get hold of.
- 10144 Q You did not tell me that you had found gas in the Mount Kisco mine? A No, I did not tell you.
- 10145 Q Will you tell the Commission what difference there was between your theory of gas and the slight explosion, in you call it, which these men described to you? A Well, of course, I could not find any sign of their gas.
- 10146 Q If there is a light applied it generally goes off? A Yes.
- 10147 Q And you would not find anything immediately afterwards? A I do not think you would.
- 10148 Q The fact that you did not find it afterwards did not prove that there was none there before? A I did not say so.
- 10149 Q Then what is your reason for distinguishing between what they saw and what you find? A I judge from their description of it.
- 10150 Q What was their description? A Glasses were flashed downwards. It all seems that I have heard of a man in the road.
- 10151 Q The gas being lighter than the air it rises to the roof? A Yes.
- 10152 Q Suppose it suddenly escapes from the hole at the end and goes off, it would not necessarily be in the roof? A Do you mean a hole of gas?
- 10153 Q A small hole? A A man would not have time to see how it went.
- 10154 Q A man might be injured and run seriously injured if the quantity of gas is small? A Yes.
- 10155 Q How could you distinguish it in that case? A I could not distinguish it then.
- 10156 Q Well you told me that inspection look which you have done? A What do you want to see?
- 10157 Q Do you not think that it ought to be quite open (addressing Mr. Miner), Mr. Lawyer, witness to see it.
- 10158 Mr. Miner: It is here.
- 10159 Mr. Miner Smith: There are no events in it.
- 10160 Mr. Miner: There can be no objection as far as I can see.
- 10161 Mr. Miner Smith: It is open in inspection, and I take it that it is public property. Is there anything which the witness objects to being seen?
- 10162 Witness: I do not think so.
- 10163 Mr. Miner: The book is in Court, and I think anyone ought to be allowed to inspect it.
- 10164 Mr. Forester: The book is kept under special rules, but I think it comes under the Act of Parliament.
- 10165 [After a little further discussion the witness withdrew his objection, and the book was handed to Counsel.]
- 10166 Mr. Miner Smith: Q You admit that gas has been found several times at Mount Kisco—you are not now working with lamps? A We are working with open lights.
- 10167 Q Notwithstanding that you have found gas? A We have never found gas so far as my quantity. It has been either from a civil hole or on the face. It has never been on the roof.
- 10168 Q Do you examine the mine with a safety lamp? A I examine with a safety lamp.
- 10169 Q Have you ever seen the gas flash? A I believe I have.
- 10170 Q How long ago is that? A It is about the time that we found it.
- 10171 Q The time which the man mentioned? A No, not that time.
- 10172 Q How long ago is that? A About five months ago. It was nearly slight and not again.
- 10173 Q There was enough to light? A It was like a glowworm.
- 10174 Q What was would it be? A Just about as big as a man's finger and.
- 10175 Q Where did you see it? A In the face.
- 10176 Q Is a hole? A No, it was in a crevice.
- 10177 Q What shows that there is gas in the mine? A Yes, I suppose it does.
- 10178 Q Has that mine been reported in your book? A Every occasion on which I have seen gas has been recorded.
- 10179 Q You say you always examine with a safety lamp? A Yes.
- 10180 Q Have you ever recommended that it was necessary that safety lamps should be used in the mine? A No, it was not necessary.
- 10181 Q You do not think it is necessary now? A No.
- 10182 Q How do you fire shots now? A By fuse and by open light.
- 10183 Q You do that still? A Yes.
- 10184 Q Then you have made no change whatever as the method of lighting shots or in the management of the mine since the Mount Kisco disaster? A No, we have only had extra inspection.
- 10185 Q So far as lighting shot is concerned, there is no difference? A It is just the same.
- 10186 Q You tell us you water the mine with water? A We have a line and pipe on the main road.
- 10187 Q For spraying? A Yes.
- 10188 Q When was that adopted—since the Mount Kisco disaster? A Yes, we have only opened up that district fully since then.
- 10189 Q In this system has only been adopted since the district has been opened up? A The main roads were watered before.

18190. Q How were they watered before? A By watering tele. We had a spray out out of the back of the tele, so that it would distribute the water.
18191. Q Would it go on the side? A Here would go on the floor.
18192. Q Would the sides be treated? A Yes.
18193. Q Do you follow that system now? A We use the pump instead.
18194. Q And the hose? A And the hose.
18195. Q How far up the side do you spray? A To the roof.
18196. Q And you water the roof, too? A Yes, when it is dusty.
18197. Q From the knowledge which you have of theoretical farming, is there any danger likely to arise to the soil from watering that way? A There is.
18198. Q There is an objection to watering the roof? A I know that there is.
18199. Q I want you to say of your own knowledge.
18200. A Yes, I think the witness means that there is more than a theoretical objection—the harm of it.
18201. A Yes, I think so. Q Have you seen the effects of the water on the roof? A If you notice the stone with water it breaks off.
18202. Q And that is an element of danger? A Yes, if you put too much water on.
18203. Q That is one of the dangers which some persons are against the use of water? A Yes.
18204. Q How much of the water do you water in that way—by spraying? A I suppose we have from half to three-quarters of a mile watered with hose.
18205. Q That is the whole of the area which is watered in that way? A Yes.
18206. Q You water the main house and roof? A Yes, a lot of the main is wet.
18207. Q You do not do the back roads? A No, we do them with carts.
18208. Q All that is not done merely to get rid of the water? A No, we have the water led on into the main.
18209. Q Does the water go outside the main on to the sides, where there is liable to fall? A Yes.
18210. Q You always water before firing a shot? A Yes, certainly, all dry places.
18211. Q How is that done? A With a bucket, by sprinkling it.
18212. Q Is that sufficient? A Well, it keeps the dust down.
18213. Q Is it sufficient, in your opinion? A Yes, it will do.
18214. Q I suppose you look at the thing from the man's point of view, the man who when you were a soldier? A Yes, I do.
18215. Q You would not dissent from doing anything you thought necessary merely because you wanted to increase the ground then as to economy? A Our orders are to do everything necessary in the main for the safety of the men.
18216. Q Are those the orders from the Manager? A Yes.
18217. Q Have you any agents? A Mr. Victory is business manager.
18218. Q He is not called the agent? A There were before he called the agent.
18219. Q Does your Manager spend money when it seems to him to be necessary? A Yes.
18220. Q You do not know of any man who has had to commit the agent? A No, not where it is necessary for the safety of the mine.
18221. Q Are those instructions to you in paper, or were they verbal instructions? A I do not think I have them in paper.
18222. Q When you would call general instructions or verbal instructions? A They may have been verbal instructions. I have had written instructions given to me, but I do not know whether those were part of them. I know I have been told them.
18223. Q How do you account for the fact that you have not seen to have been discovered in Koro until after the Mount Kennedy disaster, although you have been there thirteen years? A Because we have never got into the same position of coal before.
18224. Q Have you been mining nearer to the Kennedy boundaries? A We are working nearer that way.
18225. Q Have near to you? A Oh, 2 or 3 miles away.
18226. Q I mean the district which you are now developing? A It is working nearer to Kennedy and further into the moraine.
18227. Q I take it that you never heard of gas before it's Mount Koro's disaster? A No, it is the eastern part that I have been in.
18228. Q Did you hear of it before you were there? A I do not think so.
18229. Q How soon after the Mount Kennedy disaster was it discovered? A In 5 or 6 months, 1920.
18230. Q Was that the first time? A I can tell you by looking at the book.
18231. Q I want to know how near the first time of gas was to the Mount Kennedy disaster, because it is certainly a strange coincidence? A I see it was on the 16th of September, 1921. That seems to be the first time it had been seen.

Re-examination by Mr. Lynght—

18232. Q Did you look to go through this book? A Where?
18233. Q At any time? A Yes.
18234. Q Do you know that in August Mr. Phillips discovered gas? A I do not interfere with his work.
18235. Q I want to know where Phillips discovered it? A I cannot say.
18236. Q Do you know that gas was discovered on the 15th of August? A That is the first time that he discovered it.
18237. Q Did you not go? A No, on the 14th of September.
18238. Q That is the first time that I discovered it.
18239. Q Who discovered it before? A The Inspector found it with the hydr gas lamp in the same place.
18240. Q How long before? A A day or two before.
18241. Q Do you know that Phillips has this entry?
- Re-examined by Mr. Lynght—
18242. Q I took him, and I saw and a small quantity of the lamp in the back heading. The quantity of the lamp was such that it would not show in the deputy's lamp.
- That entry is signed by Phillips, and the date is 12th of August, 1921? A That was when the Inspector found it. Mr. Phillips was with the Inspector.
18243. Q You discovered it on September the 14th? A Yes. How long was that afterwards?

Witness—H. J. B. 20, 21 January, 1903

- 10311 Q You had no idea of coming here and trying to make the Commissioners believe that there was no gas? A I do not wish to make the Commissioners believe anything but what I know to be correct.
- 10312 Q That was not your intention in coming here this morning? A Certainly not.
- 10313 Q What percentage of gas will your light hold? A From 2 to 3 per cent.
- 10314 Q Do you know what is the lowest per cent of gas which is regarded as dangerous when mixed with ordinary air? A Some people say that as low as 1 per cent is dangerous when mixed with ordinary air.
- 10315 Q If that is so, do you not think it absolutely necessary that the hydrogen lamp should be used?
- 10316 A I say that in any workshop place I advocate its being used.
- 10317 Q What do you regard as being explosive? A I should say where gas has been seen in the same situation.
- 10318 Q With the ordinary lamp you only discover 2½ per cent? A Yes.
- 10319 Q And you say not be able to discover when the dangerous surroundings. Might it not occur that there would be sufficient gas to endanger lives? A You need sufficient gas when there is that power.
- 10320 Q Yes. A Then keep down the dust.
- 10321 Q As a precaution you would advocate visiting the dust? A Yes, I have advocated that right through.
- 10322 Q You assume that if you carry out visiting thoroughly, the 1 and 2 per cent, which you mention, discover with the ordinary lamp would not be dangerous? A No, it would not.
- 10323 Q The visiting is a safeguard? A That is the best safeguard which I can see.
- 10324 Q Have you any regular method of examining the waste workings? A The deputies examine them at least once a week, and go as far as they can.
- 10325 Q Do the deputies make any report on their examinations? A Yes.
- 10326 Q Are the reports in that book? A They are in a separate book.
- 10327 Q Have you done any part of that examination yourself? A Yes.
- 10328 Q What do you mean by "as far as they can go in"? A If a place is open they go into it as far as they can penetrate.
- 10329 Q As far as they can penetrate is the roof is fairly sound? A Yes.
- 10330 Q You do not say when you get to a fault or danger board? A No, I do not have a danger board when examining waste workings.
- 10331 Q You do not know a danger board then? A No.
- 10332 Q Do your special rules say that this inspection must be done in the evening? A, I think the Coal Mines Act states that.
- 10333 Q Well, this examination is made in accordance with the rules? A Yes.
- 10334 Q You have been on both the night and day shifts? A Not much on the night shift.
- 10335 Q You have been some considerable time on the day shift? A Yes, for about six years.
- 10336 Q You have had a superior deputy? A Yes.
- 10337 Q What method do you adopt when examining a mine during the day time? A All the travelling roads and working places are examined in the morning before the men are allowed to pass the danger board.
- 10338 Q Do you make any examination afterwards? A Yes.
- 10339 Q What do you do? A Our instructions are to have the full examination for the latter end of the shift. Any time we want in between the two inspections we can.
- 10340 Q You make regular inspections? A At the front and back end of the shift.
- 10341 Q Do you go through the same method on the last morning as on the first? A Not always.
- 10342 Q When is the practice? A We do not examine with safety lamps and perhaps three years ago. That is, on the second inspection. That is, when we were going into a place where nobody was working, and then we had to use safety lamps.
- 10343 Q Did you examine each level and heading? A Yes.
- 10344 Q You did the examination the same as in the early morning? A Yes.
- 10345 Q Did you test for gas? A After we started carrying a safety lamp we did so.
- 10346 Q Have safety examining deputies are there now at Mount Kisco? A We have three.
- 10347 Q Three on one shift? A Two on the day shift, and one on the night shift.
- 10348 Q What number of places are you working? A About seventy.
- 10349 Q What number of places are you working? A I cannot tell you.
- 10350 Q Do you have three there now in the Mount Kisco disaster taking place? A There had been three, and then when the disaster came out clear together we cut it down to two.
- 10351 Q What that year in the disaster? A Yes.
- 10352 Q Since the disaster an additional one has been put on? A Yes, but the master was killed about before the disaster is spreading out into new coal, and getting bigger.
- 10353 Q Do the deputies do the whole of the workings? A No, we have beaties now.
- 10354 Q You have men told off for that work? A Yes.
- 10355 Q What distance do you endeavour to keep the beaties from the fire? A Generally at the dip end.

Re-examined by Mr. Bruce Smith —

- 10356 Q In firing shots in your mine, who fires them? A The miners generally fire, but in cases where gas has been seen the deputy has to examine the place before the hole is charged.
- 10357 Q Are not some of your places dry and dusty? A The dry places are watered.
- 10358 Q But they are dry and dusty before? A Some of them are.
- 10359 Q You know that the rule requires that they shall not be fired excepting under the direction of a competent person. But you are allowing the miners to do it? A The miners are never allowed in a place which is dry enough to be dangerous.
- 10360 Q Are you not allowing the miners to fire shots in all places? A The mine has the shot in a mine, but the deputy is on the spot to examine the place.
- 10361 Q In what cases? A In cases where gas has been seen or in any other case where the Manager has given instructions.
- 10362 Q You were that that the place is dry does not mean that the deputy has to go in? A The order was given six months ago that dusty places have to be seen by the deputy.

From: St. John, 26 January, 1947.

10075. Q I see that on August the first you began reporting when you did not find gas. You say, "I examined all the old workings as far as possible between Main Street and No. 4 Cross-cut workings. We found no freckling or any other dead gas?" A Yes.
 10076. Q Why did you begin to report in the negative? A That information was given many years ago.
 10077. Q I see and intend your testing instructions to report gas when you find it? A It was our instructions to report whether we found it or not.
 10078. Q That began on August 1? A That is when I started.
 10079. Q Are you opposed to my, without my looking in the back, that prior to this time, which is twenty days after the Miami Kanfield accident you never reported gas? A I never reported freckling. I never reported it, and never saw it.

Examined by Mr. Ritchie —

10080. Q Do you say that you had to report when you did not find gas? A There were Mr. McClellan's instructions. We had a printed book which had the questions printed. "Have you found gas or freckling?" and we had to fill in the answer.
 10081. Q It only appears in this book on the 1st of August for the first time? A That is the beginning of the book. I say that we had printed instructions before "Have you found any gas?" and the practice of reporting has been continued since.

ALEXANDER McDONALD was sworn in and named as a doctor —

(The witness was called by the Commission, who asked Mr. Bruce Smith, as a matter of convenience, to conduct the examination in chief.)

Examination in chief by Mr. Bruce Smith —

10082. Q What is your name? A Alexander McDonald.
 10083. Q What are you? A I am a Deputy at Miami Kanfield.
 10084. Q How long have you been there? A I have been there a number of years, I have been away for short times and been again.
 10085. Q You know the two Glascoes? A Yes.
 10086. Q Do you remember a few weeks ago that Glasco released Mr. Jahn, in your presence, that he had found gas in their workings? A I remember it.
 10087. Q Can you tell the Court what took place on that occasion? A I remember going into Glasco's home.
 10088. Q About? A Mr. Jahn was there when I got in. Jahn informed me that Glasco had reported to him that he (Glasco) had "let her up", meaning that he had started something in the hole. Jahn said, "I cannot find a trace of anything," at the same time putting his hand to the roof near where Glasco said he had "let her up". Glasco was lying along a hole on the other side of the floor, and, when he had finished the work, Jahn again returned to the coal hole, at the same time calling Glasco's attention to it.
 10089. Q What did he say? A When he returned to the coal hole, Jahn said that "if there was any gas there it would show in a small blue top over the flame," and peacefully he gave Glasco a lesson of how to use the lamp.
 10090. Q Did Jahn express an opinion as to whether there had been any gas there? A He said, "There was not the slightest trace of gas here."
 10091. Q Did he say it was not worth speaking of? A Not in my presence.
 10092. Q No in their words? A No.
 10093. Q Was there any gas in that working place when that took place? A Very little smoke.
 10094. Q Was there any substance as the result of powder? A There had been that being on the night-hand side.
 10095. Q How long before? A The coal had not been put in the skip, it was lying on the floor.
 10096. Q Did Jahn say "It is not freckling, but gas from the powder"? A He said that in his opinion.
 10097. Q What did he say? A He said in my probability you have hit the powder faces.
 10098. Q At any time that you were there, did he say "It is not worth speaking of"? A He did not use those words in my presence.
 10099. Q Did you say anything yourself? A I remarked that probably they had ignited the powder smoke.
 10100. Q Did you say anything yourself? A I said that it was not gas, because I had never found the slightest trace there.
 10101. Q Did you say, "Powder smoke makes for live gas"? A That is my opinion.
 10102. Q Have you passed an examination? A Yes, the second-class one.
 10103. Q Have you been up for your first certificate? A Yes.
 10104. Q Where did you get your idea from that there had been an explosion of gas from powder? A The authorities tell us that powder produces gas.
 10105. Q What looks? A Powder and coal.
 10106. Q You have been making the same looks as Jahn? A Yes.
 10107. Q Were you fellow students? A We were.
 10108. Q Have you seen the famous brown powder spike and display a flame like gas? A Yes.
 10109. Q Where? A At Miami Kanfield.
 10110. Q What led you to believe that that flame was from powder? A The fact of never having seen any gas flame, and then the fact that when there is a hanging dust and the powder faces get down I could light gas flames, and then the fact that when there is a hanging dust it is a small light.
 10111. Q You have been there some years? A Yes.
 10112. Q You know that gas has been found in small quantities? A Yes, I have found it.
 10113. Q Where? A Not in the place where I have worked powder faces.
 10114. Q I am asking if you have found it? A Yes.
 10115. Q I am asking if you have found it? A I found it with a safety lamp.
 10116. Q Have you a quote when you found it? A A small quantity was.
 10117. Q Did you see it there up? A A small quantity was.
 10118. Q What is the farthest date back that you have seen it? A I found a small quantity last week.

Continued, Montreal, 20 January, 1934

- 10418 Q That is the nearest date? A The farthest date back on my memory is some three months previous to that, somewhere about September.
- 10417 Q Never before then? A No.
- 10416 Q You never heard of it being found before then? A I never heard of it being found before that.
- 10415 Q You report in the book that Jubb reports it? A No, in a different book. My report book is here to day.
- 10414 Q Jubb reports in that book? A No, my book was sent in to the Secretary to-day.
- 10413 Q I understand you to say that you never saw gas, or found gas, or heard of the being found, at least of a being seen, prior to the Montreal disaster? A That is right.
- 10412 Q Do you report negatively in your book? A Yes, yes. "I found no gas." I report fully whether I have found gas or not.
- 10411 Q If you had seen do you expect, "I have found some"? A Really no.
- 10410 Q How long have you been doing that? A Ever since I have been a deputy.
- 10409 Q How long is that? A Approximately for the last six months.
- 10408 Q Before the Mount Kemble disaster? A No, after it.
- 10407 Q Here is a report of the 5th of June, 1933. Is not that yours? A No.
- 10406 Q You report in numerous other books? Is this a (holding up a book)? A No.
- 10405 Q Did you begin a new book when you became deputy? A No, I made some reports in an old book.
- 10404 Q [The last witness, Jubb, finished a book in Mr. Bruce Smith's.]
- 10403 Q Is this the book in which you report? A Yes, that is the book.
- 10402 Q Was it Falligan? A He is the under manager.
- 10401 Q Just show me a report of yours when you found fire-damp? A Here is an entry on the 25th of August, 1932. "It has been reported to me that James and George Thompson lighted a small quantity of fire-damp at their working place (No 4 left heading, Old St. Hubert, on Sunday, August 29th.)"
- 10400 Q Is this the beginning of your work as a deputy? A Not exactly; I reported a 19th time that book.
- 10399 Q How long before? A After the Mount Kemble explosion.
- 10398 Q You never reported before the Mount Kemble explosion? A When I was acting temporarily.
- 10397 Q Did you report, you admit you were temporarily appointed? A No.
- 10396 Q Nor ever heard of it? A No.
- 10395 Q It was an entirely new thing in Kribs after the Kemble explosion? A Yes.
- 10394 Q What do you attribute the fact to of finding gas as soon after the Kemble disaster, and not before it? A I have not thought of that matter.
- 10393 Q You have not thought of an interesting problem? A Well, yes, I have thought about it.
- 10392 Q Are you writing up a new document? A Yes, we are going into rising ground.
- 10391 Q Are you going over to Mount Kemble? A We are going about now.
- 10390 Q Are you going over to Mount Kemble or further from it? A I believe we are going over to it.
- 10389 Q Now, you have not told me yet how you distinguish between a small explosion of gas and a small explosion of gunpowder fumes? A Here I distinguish between a small explosion of gas and a small explosion of fumes.
- 10388 Q Yes? A If I spotted fumes I would not expect fire-damp to be there, because I would light the fumes on the floor.
- 10387 Q You mean that if you fit something on the floor you would not think it to be gas? A No, I would not take it to be gas.
- 10386 Q And if you were to light something on the roof, you would not expect it to be fumes? A No.
- 10385 Q Can you see the top? A Yes.
- 10384 Q Suppose there is an column of gas at the lower part, it would light at the lower part? A Yes.
- 10383 Q Would you conclude, therefore, if you had a flame, that it was gunpowder fumes? A Well, no.
- 10382 Q Why? A There is a difference in the flame.
- 10381 Q Is it a question of color? A Yes.
- 10380 Q Suppose you had not seen it, and were only told it was a flame? A If I had not seen it it would be hard to tell.
- 10379 Q Did you see the flame in Gleason's case? A No.
- 10378 Q And you know nothing of the question? A It was 2 feet from the roof.
- 10377 Q Was it nearer the roof than the floor? A Yes.
- 10376 Q And yet you concluded that it was gunpowder fumes? A Yes, we had never found gas in the vicinity.
- 10375 Q You had found gas in the mine? A Not at that particular part.
- 10374 Q Not near it? A Some distance from it.
- 10373 Q That is your only reason—you did not know anything of the color of the flame—it was nearer the roof than the floor, but, because gas had not been found in that particular part of the mine, you concluded that it was gunpowder fumes? A I thought that it might be, but I was not sure.
- 10372 Q Mr. Johnson? Q Did you ever know of fire-damp being found on this district on the floor? A I have heard tell of it.
- 10371 Q Did you ever find it at Kribs? A No.
- 10370 Q You know that fire-damp can be found on the floor as well as on the roof? A Yes.
- [The Commission, at 4 o'clock, adjourned until 10 o'clock the following morning.]

[The Commission met at the Court House, Wellington, at 11 a.m.]

Present—

C. E. R. MURRAY, Esq., D.C.J. (PRESIDENT)

B. A. W. ROBERTSON, Esq., COMMISSIONER. D. HITCHER, Esq., CLERK OF THE COURT.

Mr. Bruce Smith, Barrister-at-Law, instructed by Mr. J. J. O. O'Connor, Solicitor's Office, appeared on behalf of the Crown.

* Mr. A. A. Ashmore, Chief Inspector of Coal Mines, assisted Mr. Bruce Smith.

Mr. A. A. Lough, Solicitor, appeared on behalf of—

- (a) the representatives of deceased miners, widows, &c., (victims of the explosion);
- (b) the employees of the Mount Kemble Colliery (miners, winders, &c.), and
- (c) the Mount Kemble Colliery Employees' Association (the Southern Mines Union).

Mr. F. E. Liffie, Solicitor, appeared on behalf of the Mount Kemble Coal and Oil Company (Proprietors of the Mount Kemble Mine).

(Mr. J. Gatliff, Secretary to the Commission, was present to take shorthand notes of the evidence and proceedings.)

Mr. ALEXANDER McDONALD, previously sworn, was further examined as under—

Cross-examination by Mr. Lough—

22445 Q Who desired you to meet here? A Nobody, except the witnesses.

22445 Q Did you say conversation with Mr. J. O. Jones? A I did.

22446 Q Did not he tell you that he wanted you to give evidence? A He drew my attention to the evidence of the witness.

22447 Q Did not he tell you that he wanted you to give evidence? A He asked me how far it was from here. He did not say he wanted me to give evidence.

22448 Q How far was it from here? A Some of the witnesses.

22449 Q Which? A Referring to witness having reported me to me as a second witness.

22450 Q Which witness? A As far as I understood the report in the newspaper, Alfred Gibson, I think it was, said that he reported me to me after the occurrence that we spoke of yesterday.

22451 Q And is not that so? A No.

22452 Q Did not he mention any part to you at all? A No other, only the one that we referred to yesterday.

22453 Q And is that all you came to deny? A No.

22454 Q Well, now, how often have you found gas in Kirihi? A You have my book here, every time I found gas I reported to the book.

22455 Q Roughly, I do not want to labour the Commission with your book? A I think I found gas about, say, three times. I cannot be sure about it.

22456 Q Since the disaster? A Since the disaster.

22457 Q Was there a large quantity? A No.

22458 Q And before the disaster you had never discovered it? A No.

22459 Q How, about how often has the air been proved in Kirihi through the westerly wind? A I do not remember it being proved.

22460 Q From any cause? A Not from any cause.

22461 Q Do you remember it being a stinkall? A No.

22462 Q Do you know that your brother gave evidence that he had known it to be proved? A I do.

22463 Q When did you see him at the mine house in his way? A I may have been.

22464 Q You are not prepared to say that he was in Kirihi? A No.

22465 Q I suppose you will admit that the witness frequently does not work well? A No, I never knew it to work badly.

22466 Q You do know that they are making arrangements to put up a fan? A I have heard that they are going to make a shaft to meet a fan.

22467 Q Do you not know that several of the photos are going to be taken from time to time? A Not in my mind.

22468 Q How long have you had your rotations? A About three and a half years, as near as I can remember.

22469 Q Now, I will ask you your opinion as to the of these recommendations. Recommendation No. 1—

* Managers, under managers, deputies, and that is to be, to hold certificates of competency by examination, and to have had five years' practical mining experience before being eligible for respective positions? Do you approve of that recommendation? A I can only advise as to the having the practical experience.

22470 Q Do you not believe in giving them certificates by examination? A No, as far as managers and under managers are concerned, I do not think it is absolutely necessary.

22471 Q And then deputies? A They would be on a par with the deputies, I think.

22472 Q Then do you say that deputies and that there should be approved without giving any evidence to any competent authority of their ability to discharge their duties? A I would not say that.

22473 Q Unless they are established by examination, how can you determine whether deputies are competent or not? A I take it that the Manager would put a man under a certain examination before he would appoint him to the position.

22474 Q Then, would you only consider as the Manager in appointing him to the position? A I think that is all that is necessary.

22475 Q That is your view? A Yes, my opinion.

22476 Q Do you know that one of the deputies in Kirihi mine as to be had never looked for gas, and that it was not part of his duty to look for gas? A No.

22477.

Witness—A. McDowell, 90 January, 1903.

20498. Q If he said that, would you consider he was a competent deputy? A I would not.
20499. Q And, if the Manager said that he knew nothing about gas, would you consider him a competent person to appoint a deputy?
20500. (Mr. Bruce Smith objected, but the House allowed the question.)
20501. Mr. Langley. Q If a Manager whom that he knows nothing about gas, is he a competent person to appoint a deputy? A Technically or theoretically.
20502. Q No? A Oh, if he knows nothing at all about it, I do not think he is.
20503. Q In such a case, which has happened in this district, who should appoint the deputy? A Oh, the Manager, by all means.
20504. Q The same Manager? A I do not say so.
20505. Mr. House. [The question is whether any Manager has said that he knows nothing about gas. The Manager may have said that he knows nothing about the composition of gas chemically, but he knows nothing about gas, and knowing nothing about the composition of gas chemically, are different things.]
20506. Mr. Bruce Smith. Yes, House, I am not concerned in directing Mr. Rogers at all.
20507. Mr. House. [I do not think Mr. Rogers said he knew nothing at all about gas, but he said he knew nothing about its chemical composition, because he does not understand chemistry, and that is a very different thing. A man may know a good deal about a horse without knowing anything about his anatomy.]
20508. Mr. Langley. Q Now, do you not know that there are managers in the district who have not certificates of service? A I have heard so.
20509. Q Do you know whether Mr. Jones has a certificate by examination? A I was told he had.
20510. Q Now, in the case of those Managers who have no theoretical knowledge of the composition of gas, would you consider them competent to appoint a man to be a deputy? A I think so, provided they have a practical knowledge.
20511. Q And you think the same thing applies to the district? A Yes.
20512. Q There, are you in favor of these certificates of service being cancelled after a reasonable time? A After a reasonable time, probably, yes.
20513. Q Recommendation No. 2. If the Government Legislature think it necessary to order sub-pumps into a mine, should they have that power? A I would say the Chief Inspector should have the power.
20514. Q Recommendation No. 3. "Verification by furnace prohibited, and fire substantiated." Do you approve of that as a general recommendation? A No.
20515. Q What is your objection to it? A My objection would be this: the property might not be large enough to warrant the erection of a furnace. There would be a great expense.
20516. Q That is your only objection? A Yes.
20517. Q Then what number of men, do you say, should be employed below ground, before you would enforce the law? A I do not think we should have it in any number of men.
20518. Q Then, how would you heat the furnace? When would you consider a furnace large enough to warrant a furnace being referred to? In my opinion the ventilation is the best, but, in the same case, I do not think it would be right to make a furnace and heat with.
20519. Q You have gone, as a reason, that the workings would not be large enough. Now, I am keeping you in that course. I want to know, at what stage do you consider the workings would be large enough to warrant the enforcement of the law? A That would be a matter of pounds, shillings, and pence.
20520. Q What would you say would be large enough to warrant the enforcement of the law? A
20521. Mr. House. [The witness could not say that. That is a question that would take a deliberative assembly possibly a week to settle.]
20522. Mr. Langley. Q Have you any other reason besides the size of the colliery? A Provided the ventilation was sufficient without it, I cannot see any necessity for the erection of a furnace.
20523. Q Is the ventilation sufficient at Kilmarnock? A It is.
20524. Q And you do not see any necessity for the erection of the furnace there? A Not at the present time.
20525. Q And yet you know they are about to do it? A I believe so.
20526. Q Did you recommend it? A No.
20527. Recommendation No. 4. "Waste workings to be absolutely sealed off, and surrounded by return airways (the floor of roadway), such return airways not to come in contact with intake." Do you approve of that? A I would never contain the waste workings.
20528. But would you have them surrounded by return airways? That is, would you provide that no intake should pass them? A That is, that the intake air should not pass over them? Certainly.
20529. Q Yes; not to pass by them? A That they should be sealed off from the intake air.
20530. Q Yes? A Yes, I believe so.
20531. Q Recommendation No. 5. "All pillars except props or props driven to have cut through not less than 30 yards apart." A I do not agree with that.
20532. Q Why? A I think that we can drive headings considerably over 30 yards, without any danger.
20533. Q How far do you think you could drive them? A I think we could drive them a couple of hundred yards, provided we had a sufficient level of air.
20534. Q Have you ever driven them a couple of hundred yards? A No.
20535. Q What is the longest you have driven them? A About 75 yards.
20536. Q Is there not a danger of the heading becoming disarranged near where the drive starts, and the men being endangered through want of air? A There is the same danger in the 10 yard pillars.
20537. Q Is not the danger increased by 40 yards? A I cannot see much difference. There is always a danger of the heading becoming disarranged, of course.
20538. Q Is not there a considerable leakage from imperfect brattice? A In some places, yes.
20539. Q As a matter of fact, after the brattice has been in use a few months, say six months, it gradually becomes a sieve? A No, we never see it.
20540. Q I know; but did not I say, after it was in use six months? A In some cases it lasts longer than that.
20541. Q What is the average length of life of the brattice you see there? A I could not say.
20542. Q Do not you put it up? A Yes.

- 12042 Q Do you not know how often you have been there? A Since if it would last six months, at 607 mile.
- 12043 Q Then, after six months it was possible to open? A Not at all cases.
- 12044 Q The air was got through the battery-chute itself? It not that way? A Not always.
- 12045 Q After about six months' wear and tear? A We generally renew it when we see that there is any leakage.
- 12046 Q But apart from leakage through imperfect making up or uneven seals, does not the air go through the battery itself after about six months? A Well, I could not say.
- 12047 Q Do you not know that from your own experience? A Not unless there are holes in it.
- 12048 Q Between mechanical seals, through? Does it not? A Not always.
- 12049 Q As a general rule? A It depends on the discipline a good deal.
- 12050 Q Well, in Korea? A I cannot say about that.
- 12051 Q Do you say that you renew a every six months, although it is not perfected? A No, not at all. Even, as visiting an engine on the life of it, that six months would be about the life of it. I am not sure about that answer. It is only my opinion.
- 12052 Q I suppose you are constantly renewing it even now? A No.
- 12053 Q Can you tell me when the last new building was put up at Kien? A The last new additional building was put up, I suppose, yesterday.
- 12054 Q It is going on from day to day, repairing? A Yes.
- 12055 Q Now, do you not appreciate the danger of men being 70 yards away from any possible escape on any anything gone wrong? A There is plenty of ventilation.
- 12056 Q Yes, but if anything goes wrong with the ventilation, do you not see they are 70 yards away from an escape, whereas if they have a cut-through 30 yards away they could escape through that? A I cannot see any great danger in that.
- 12057 Q But do not you see any danger in that? A There may be a little danger.
- 12058 Q Would not the cut-through every 30 yards be an improvement? I do not see it is necessary, but would it be an improvement? A It would be an improvement, yes.
- 12059 Q Recommendation No 7—"Weekly examination and report by deputy and District Inspector with hydrogen flame"? Do you approve of that? A I do not see that it would be out of place, that is, when together with the District Inspector.
- 12060 Q No, not at the same time, but to have a weekly examination made by the Government Inspector, and also by the management, as an extra provision? A I do not see that it is altogether necessary.
- 12061 Q Would you say every quarter then? A Yes, every quarter.
- 12062 Q Recommendation No 11—"Weekly measurement of air in each station, and report shared sent to Inspector"? Do you approve of that? A Yes, as a matter of fact we make a weekly inspection.
- 12063 Q And that has not given you any extra trouble? A No, it is not much trouble.
- 12064 Q Where do you take the measurement? A At the intake to the split and the outlet.
- 12065 Q Do you take that? A No, the under manager. I cannot remember.
- 12066 Q Recommendation No 12—"Extra supply of safety-lamps and their inspection, equal to one third of number of persons employed below ground, to be kept ready to good order and ready for use"? Do you approve of that? A Yes, I don't see that would be a fair provision.
- 12067 Q Did you go to Kumbia after the disaster? A Yes.
- 12068 Q The next evening? A Yes.
- 12069 Q Did you take your lamp with you? A Yes.
- 12070 Q Did you know at the time that there were no lamps available at Kumbia? A No.
- 12071 Q Did you know at the time that there were no lamps available at Kumbia? A No.
- 12072 Q You discovered that when you got there? A Yes. There were lamps when I got there, and you.
- 12073 Q What time did you get there? A Between 7 and 8, I suppose.
- 12074 Q You know they came from other collieries? A I do not know where they came from. I saw lamps there when I got there.
- 12075 Q Recommendation No 13—"Traveling and baggage roads, and other places necessary, to be properly watched"? A Yes, I approve of that.
- 12076 Q Recommendation No 14—"Managers employed to give more personal time and attention to management of colliery"? A Well, so far as our colliery is concerned, I do not think our Manager could do more.
- 12077 Q How often is Mr. James on, on an average? A I am on two or three times a week.
- 12078 Q That is what you think would be proper attention? A I think so.
- 12079 Q Recommendation No 15—"Provision to employees regularly on account of escape"? A I hardly remember that.
- 12080 Q In case of disaster the men should be shown the different roads. Do you approve of that? A It would be rather a difficult matter to do that.
- 12081 Q Why? A To get all the men together for that purpose would be rather difficult. I do not think you could do it.
- 12082 Q Could not the deputies get a division of the men, say, once a fortnight, each deputy in his own place, and show the men out as they are running out from work? A Would the men be willing to do it?
- 12083 Q Of course they would. A I think so.
- 12084 Q Assuming the men are willing to be shown a safe way out, do you think the deputies would have any objection to showing them? A The deputies could not have any objection, provided it did not interfere with their other duties.
- 12085 Q In your opinion, would a quarterly showing of the men out interfere with any of the deputies' duties? A It would, or it would impede the working.
- 12086 Q I mean after the men knock off at the end of a shift? A In our colliery it would.
- 12087 Q Could not the deputies be got now? A They might, but there might be other ways of safety.
- 12088 Q What other ways would you suggest? A I would suggest that the deputies should change stations every quarter so that each deputy would have a thorough knowledge of the whole of the mine. I think that would be sufficient.
- 12089 Q For the safety of all the men? A Yes.
- 12090 Q For the safety of all the men? A Yes.
- 12091 Q For the safety of all the men? A Yes.

[Pages 2-3, McDonald, 15 January, 1905.]

20202 Q Do you not know that the deputy got his head blown off in Kanab? A I have heard that.

20203 Q Now, how could a man who got the first full force of the explosion show the other men out? A The other deputy may have been able to show the men out.

20204 Q Do you not know that the other deputy had to escape from the after-damp himself? A I do not know.

20205 Q Do you not know that David Evans had to go a long way round to avoid the after-damp? A I am not sure that he showed a lot of men out also.

20206 Q Now, I put it to you that, supposing the deputies got into the disaster, what is the value of your suggestion? Is it not much better that each man should know his own road out, and be able to save himself? A It would be much better, but, supposing that we showed the men out once a quarter would they remember it again?

20207 Q That would be their task out. Now, do you approve of showing the men the way out if they are willing to be shown? A Enforced that nothing better could be suggested.

20208 Q Recommendation No. 22—"Safety-lamps not to be withdrawn for short firing." Is a system where it is necessary to use safety lamps do you consider it a dangerous practice to unlock the safety lamp to fire the fuse? A I think it would be much better to fire by electric battery.

20209 Q Is it not clearly a dangerous practice to fire with the naked light, if it is necessary to sometimes, lamps in the mine? A No, not necessarily dangerous.

20210 Q In your opinion, is it a good practice? A I do not think I would go to fire that practice.

20211 Q How long have you known the practice to consist in the working place at Kanab? A I never knew it to stand in a place.

20212 Q Not for any length of time? A No, the mine might move along with the current.

20213 Q Do you know that the Glenora's press evaluates that the rocks has returned to their working place a while night? A Yes, I saw that reported in the newspapers.

20214 Q Are you prepared to say that that is not correct? A I will say that I stated their working place was not correct, and it was not correct. I cannot say that they would have made standing in that place.

20215 Q Are you prepared to swear that their statement is not correct? A No.

Further examination by Mr. Bruce Smith.—

20216 Q I would ask you first how many years' experience have you had as a practical miner? A Somewhere about twenty years.

20217 Q And you have only been a deputy a few months? A I have been permanently appointed a few months.

20218 Q Now, have you altered your opinion, in regard to these questions upon which you are being examined, since you accepted the position of deputy? A May I take it that the questions you are prepared to suggest are the ones which were formed as a long time ago?

20219 Q I mean, at the point of view as altered that the opinion you have expressed to day are not the same as you would have expressed six months ago, as a working miner? A About the same.

20220 And I take it that any opinion you give to day are based on your experience as a miner, not as a deputy? A Not as a deputy.

20221 From all, with regard to the examination of deputies and shot-fires—have you found it necessary to say how a deputy or understand the elementary of gas, the composition of gas?

A No, I have not.

20222 Q What, in your opinion, is it necessary for a deputy to know in regard to gas? A It is necessary for a deputy to know how to use the safety lamp.

20223 Q Is there anything else that a deputy should know? A No.

20224 Q It is simply a question of burning the flame down? A Turning the flame down.

20225 Q So that you get an effect upon the flame by the pressure of gas? A Yes. A man must be careful, and a quick observer.

20226 Q That is a more faculty, is it not, rather than a matter of examination? An examination will not give a man a quick observation, though it may reveal whether he has got it? A Yes.

20227 Q Is there anything complex in the holding of the lamp? A No.

20228 Q Is there anything that that could not be ascertained by just an oral examination of a man? A I think any practical man with a fair knowledge of the Mining Act, as it relates to these things, ought to make a good deputy.

20229 Q Then it requires any back knowledge? A I do not think so.

20230 Q That is the conclusion you have come to? A Yes.

20231 Q Then a practical examination by a practical man, quite apart from the study of theory or books, would, in your opinion, qualify a man with practical experience for either of these positions? A I think so.

20232 Q Is there any more theoretical knowledge required in the position of watch-fire than to monitor whether gas is present, and to water the place? A If a shot fire strikes closely to the side striking to short firing and dirty place, and so on, he will be quite competent, if he is a practical man.

20233 Q I demand, from what you said to Mr. Lyngst, that, all things being equal, you consider the law is a more regular and a more reliable method of supplying air to a mine? A I think so.

20234 Q Are you prepared to offer an opinion as to whether the condition of a mine— I mean a mine in the district, not your own mine, but any other mine—would justify radically changing them to change their furnace to a fan, without regard to the cost or the convenience or other business aspects? A There may be such a case.

20235 Q But you are not prepared to offer an opinion on it? A No.

20236 Q And I understood that, in regard to the waste workings, you would not recommend that they should be sealed up altogether, but only on the inside side? A That is so.

20237 Q Well now, with regard to the cost thereof, I understood you to say that, from your experience as a miner, you do not think it necessary to make a drive or a heading to 50 or 60 yards? A I do not think that is necessary.

20238 Q Have you said at all in regard to means for your recommendations? A Yes.

20239 Q Have you heard of the Morris Colliery? A I think I have.

20240 Q Where the pillars are 40 yards apart? A Yes.

10030. Q. What is the width of the pillar in your mine as a rule? A. We have a number of pillars over 60 yards, I would say.
10031. Q. 60 yards square? A. 60 yards thick. You take a 60 yard cut-through to cut them.
10032. Q. Have you heard of the Egyptian Colossi, where there is a large pillar 65 yards square? [He answers.]
10033. Q. You think, from your practical experience, that a dose of over 100 yards or 200 yards is practicable, so long as the breathing is properly managed, and maintained? A. Yes.
10034. Q. What is the longest you have ever been 2 years? A. I could not say for certain.
10035. Q. Have you ever longer at home than here? A. I have not been home.
10036. Q. Have you been asked certain questions about a hydrogen flame, do you know anything about the hydrogen lamp? A. No.
10037. Q. When you expressed that explosion, were you aware that it is as bad as the hydrogen gas supply from the cylinder, you turn it too much, the whole lamp will burst suddenly in your hand? A. I have not anything like that.
10038. Q. And suppose an open flame suddenly, perhaps, in the presence of gas? A. Yes.
10039. Q. Do you recognize that it is an absolutely dangerous experiment, or dangerous almost to firearms, in the hands of a careless man? A. I would not like to make use of it, without I had a lesson in it, perhaps.
10040. Q. You have read enough to know that, — you have read enough to know that, unless it is very accurately burned, the whole lamp may burst in your hands? A. Yes.
10041. Q. Do you know how long it takes to make an explosion with a hydrogen lamp, as compared with the ordinary safety lamp? A. No, I do not know that.
10042. Q. Do you think that every deputy, whose knowledge is confined to that practical character you have just mentioned, would be a safe person to extract in a gassy mine with a hydrogen lamp? A. Not unless he knows how to use it.
10043. Q. You recognize that the use of such a lamp requires a much more scientific touch than a miner's? A. I think so, yes.
10044. Q. Now, I wish to ask you about this showing the way out—what is the extent of the mine in which you have got most of your experience? A. I have had most of my experience in Mount Kiffin.
10045. Q. What is the furthest distance you can go to Mount Kiffin? A. I think about 2 miles, hardly 3 miles.
10046. Q. And the furthest distance served? A. About a mile. It may be a mile.
10047. Q. And how long has that been worked, to your knowledge? A. Never since I was a boy.
10048. Q. Suppose you know a certain rock thoroughly well, does it follow that, because you know that, therefore you would be able to ride the mine, even to it, under all the conditions of possible explosion? The mine has not been worked that far.
10049. Q. You have been asked whether the men should not be instructed in the mine. Take that [pointing to the plan] as an exit from the mine. I ask you that, as a practical miner, would not the way in which you would reach that depend entirely upon the position of the spot at which the explosion took place? A. Yes.
10050. Q. Did you hear Mr. Lyngby say to you just now that Mr. Brown had to take the men a long way round to avoid the after-damp? A. Yes.
10051. Q. Would it be any good showing a man a straight way out when what he really wanted was a knowledge of the geography of the whole mine, as that he could, as it were, judge the after-damp, according to the position in which the explosion had taken place? A. He would require a knowledge of the whole mine.
10052. Q. And would you think of a dozen places in your own mine where, if there were explosions at those places, they would necessitate your taking a dozen different evasive routes in order to enable you to get safely out, and to avoid the after-damp? A. Yes.
10053. Q. And that it is not absolutely necessary to show a man where the rock is, so that he may be able to take a straight course out in case of explosion, but he would have to have all the different exits, and would have to be aware of the route which the air was taking, so as to judge the dangerous places? A. Yes, he would have to know the whole of them.
10054. Q. Would it be practicable to instruct all the miners that, in all cases, they should choose the safe route? A. I do not think so.
10055. Q. I go further—suppose these men were shown a short cut out, and taught that that is a safe way, would not that be, in certain cases, under certain conditions of explosion, an absolute danger to the men? A. It would.
10056. Q. Might not they lead them right into the after-damp, for want of thought? A. Yes.
10057. Q. So that, really, it wants a great deal of more to lay down a lead and fast rule about that sort of thing? A. I think so.
10058. Q. And the men would need to be taught different ways out, on the assumption that accidents had happened in certain parts of the mine? A. I think so.
10059. Q. Do you think there would be any difficulty in inducing the men to receive instruction in those matters? A. I think there would.
10060. Q. I would like you to tell the Commission—I am not asking you a mere case of saying to the men, "Now, boys, we will go straight out"—but if they were asked to undergo a course of instruction as to different routes, would there be any difficulty in getting the men to receive the instruction? A. I think so.
10061. Q. What would be the difficulty? A. They would not like to go to the trouble.
10062. Q. Would they give the time, do you think, considering that their lives might depend on it? A. I do not think they would be willing to give the time.
10063. Q. But you do not see any harm in the deputy offering, every quarter, to show them the right way, if they liked to listen, to give them some general idea of what they should do in case of an explosion, without giving them the exact course? A. I do not see any harm in it.
10064. Q. You think most of them would take advantage of the instruction? A. I believe they would.
10065. Q. Now, Reuben addition No. 22—can you tell me which is more dangerous, opening a lamp for the first time, or using a shot with gunpowder? A. They would be about on a par.
10066. Q. Well, the firing of a shot with gunpowder throws a flame of considerable length right into the heading where you are working? A. Yes, it would be the worst of the two.
10067. Q. As open flame which you can see if you choose to look at? A. I have seen it.

Witness—A. McCreed, 20 January, 1883.

- 10670 Q Do you not regard that as quite as great a hazard as opening the lamps? A That is the danger of the lot.
- 10671 Q Then, if it is necessary to prevent the opening of the lamps, is it not necessary to use explosive? A I would not use gunpowder where safety lamps are used.
- 10672 Q Do you not know that there are now used, in England and elsewhere, other explosives without considered to be more than the danger? A Yes.
- 10673 Q You have read about them? A Yes.
- 10674 Q So that I take it that, utilizing your practical knowledge, you consider that, if a mine is not so much as to be used with an open lamp, it is not safe enough to have gunpowder and other explosives? A It is not.

Further cross-examination by Mr. Lyngby.

- 10675 Q As a working miner, would you not have been glad to have been instructed on the various aspects of the mine? A Well, yes, as a rule, I would have liked to have known my way about.
- 10676 Q And do you not think other working miners would like to know the way now? A I do not think all of them would.
- 10677 Q Do you mean to tell me that there is a single man at Kinn who does not want to know the way out of the mine? A I believe there are men at Kinn who would not go to the trouble.
- 10678 Q Would you not mind telling me who they are, so that the men may know what you think of them? A Yes, Mr. Lyngby. That is not a fair question.
- 10679 Mr. Lyngby. But I do not like a reflection of the kind from an official of the colliery made on the whole of the men.
- 10680 Mr. Moore. It is not made on the whole of the Kinn men. The men, generally, know who are the men who go lucky amongst them.
- 10681 Mr. Lyngby. Do you mean to say that you have some reason for saying that there are some men at Kinn who would not go with the deputy if he offered to show them the way? A Yes.
- 10682 Q Do you know of any man who has ever refused to go down the way out? A No.
- 10683 Q Now, will you take back that statement that some of the men at Kinn would refuse to go down? A No. I stick to that.
- 10684 Q I thought you approved of the men being shown the way out by the deputy every quarter, but I understand from Mr. Brown Smith's examination that you do not think it would be of much avail? A I approve of it if you cannot get anything better. But I suggest, as a means of overcoming the difficulty, that the deputies should exchange duties.
- 10685 Q Supposing that in a disaster the travelling road which the men know is blocked by a heavy fall of stone, is it not better for the men to know some other way out than to be puzzled and, led to know as they can? A Yes.
- 10686 Q Would you not, then, approve of their being instructed in some other way, even though there might be some danger in that way? A I do not think it would be workable.
- 10687 Q Do you not know that at Mount Kemble the men travelling road of No. 1 Right was blocked by a fall of stone? A I do not know it, I have heard it.
- 10688 Q Do you not know that one man was struggling for three or four hours to get through that way because he did not know another way that would have taken him out in twenty minutes—a man named Newhead? A No.
- 10689 Q Take a case like that, where the known way out is blocked by a fall, is it not better that the men should know some way out? A Yes, but they may get on to the wrong road then. The road they know may be in danger.
- 10690 Q But it is not much better that they should know some road than no road at all? A Yes.
- 10691 Q And, if they are not shown, how are they to know it all? A It would be necessary to show them before they would know it.

Examination by Mr. Robertson.

- 10692 Q You are of opinion that a knowledge of the chemistry of mine gases is not necessary for shot-fires or deputies? A I think it is not necessary.
- 10693 Q And do you not think that a deputy, or a shot-fire's duties are somewhat analogous to those, viz., of a bookman or a ship? A They practically have the safety of the miners in their hands.
- 10694 Q Take the two, the bookman as a ship and the deputy in a mine, their duties are with the same, they come directly under the official? A That is right.
- 10695 Q Do you think it would help the bookman in his duties to know the chemistry of sea water? A I do not think so.
- 10696 Q And, if deputies and shot-fires were required to pass an examination, do you not think that there would be a danger that some men with an aptitude for acquiring book knowledge, but not possessing practical experience, judgment, and a knowledge of how to manage men, would obtain certificates, and that managers would be obliged to accept their services? A I think there would be a danger.
- 10697 Q The managers would be forced to accept a purely theoretical man without the practical knowledge? A There may be a danger of that.
- 10698 Q And then, in case of disaster, the theoretical man might be left? A Yes, there would be a danger of that.
- 10699 Q As a matter of fact, the qualities that go to make a good deputy or shot-fire are, in a certain extent, personal? A Yes.
- 10700 Q And they would be best known to his manager or his immediate superior? A That is so.
- 10701 Q Now, with reference to farmers—you do not approve of a deed and that rule, or a compulsory rule, that farmers should be educated? A I do not.
- 10702 Q But, in the event of farmers being employed as section men, would it not be desirable that there should be some authoritative approval of the method of their instruction? A Yes, I believe it would.
- 10703 Q That is to say, that farmers, if there are to be so employed, should be instructed upon some principle, and surrounded with every possible safeguard? A Yes, I believe so that.
- 10704 Q Now, we have heard about men being instructed by a development of the British cloth—do you think that is possible in the present state? A I do not think so.
- 10705 Q The men would have ample education of danger? A Yes.

10794. Q. And they would remove as soon as they ascertained that the air was cut off? You would expect them to report the circumstances? A. Yes.

10795. Q. So that that danger is purely imaginary? A. I think so.

10796. Q. Where it is necessary to have very large pillars, say 100 yards apart, of course cut-through every 30 yards would be put in the system? A. Yes.

10797. Q. And it is necessary to have large pillars in deep mines? A. It is.

10798. Q. And, in a matter of feet, all you require in such cases, the main object, is to have sufficient ventilation? A. That is the main object.

10799. Q. And is it not quite immaterial how that is secured? A. Immaterial.

10800. Q. So long as sufficient ventilation is supplied? A. Yes.

10801. Q. Now, Mr. Bruce Smith said something about the danger of using the hydrogen flame—do you know that the pressure in the cylinder is 1,500 lb. to the square inch? A. I believe that it is something like that.

10802. Q. And that is not a lamp to be used for every day use? A. I do not think it is.

10803. Q. Do you know anything about the time it takes to make a test with the hydrogen lamp? A. I do not.

10804. Q. Have you seen it used by anybody else? A. No.

10805. Q. You have already said that you think the main object to be attained is to go to the trouble of being shown the different exits from the mine? A. Yes, I think so.

10806. Q. Assuming that they were willing to be shown mine, say that they were willing to be shown an exit a mile long to day—do you think that they would be willing to be shown another a mile? A. I do not think so.

10807. Q. And other exits such they for 8 in, or 6 in, or less deep afterwards? A. I do not think that they would be willing to be shown.

10808. Q. And now you said it that it is quite possible that to show the different exits of a mine might take the days or more or longer cases? A. Yes.

10809. Q. There, in the event of an explosion in a mine, no one can say where it has occurred? A. No.

10810. Q. And no one can say whether the mine they may take will lead them into danger? A. They cannot be sure.

10811. Q. It is really a case up whether they go into danger or into safety? A. Yes.

10812. Q. You do not approve of gunpowder for use in any mine where gas has been seen? A. No, I do not approve of gunpowder.

10813. Q. You think some of the safety explosives should be used? A. Yes.

10814. Q. Do you know that these safety explosives are used in the mine already? A. Yes, I believe colerite is used at the Metaphos.

Examination by Mr. Riddler.—

10815. Q. Do I understand you to say that there is no greater risk to the mine working 100 yards ahead of a cut-through than there is to one working only 30 yards ahead? A. I do not think there is any greater risk.

10816. Q. Let me put a case like this to you—supposing a large full tank charged somewhere in the mine, which again cut a large blast of air heavily charged with carbonic acid gas, discharged the mine, and sent this blast of air heavily charged with carbonic acid gas into the tunnel, 100 yards ahead of the cut-through—would the mine 100 yards away have the same chance of escaping as the mine 30 yards away? A. There would be the same danger in 30 yards of the mine and gas getting in to the mine.

10817. Q. Would there be the same possible harm of the mine getting away from 100 yards ahead of the cut-through as from 30 yards? A. They would have better to go.

10818. Q. With the conditions heavily charged with carbonic acid gas, would not a mine who has to go 100 yards ahead a greater chance of giving down than a mine who has only to go 30 yards? A. Yes.

10819. Q. Now, is not there a danger? A. In a mine charged like that there would be.

10820. Q. Then you admit that there is a greater danger for the mine working 100 yards ahead of a cut-through than there is for the mine working 30 yards ahead of a cut-through? A. Under the circumstances that you state.

10821. Q. Now, you have said that it is necessary to have large pillars in a deep mine than in a shallow mine—have you got any fault to lead down to guide you in that? A. I have not fault to lead down to it.

The greater the depth the greater the pressure.

10822. Q. Would not a great deal depend on the nature of the strata immediately next to the coal? A. No.

10823. Q. If you had good hard strata for some considerable thickness next to the coal, it would be of no advantage even strata of a soft nature? A. If we had small pillars with thick covering, I do not see that the hard nature of the strata next to the coal would have much to do with it. It might bring on a creep with small pillars and thick covering.

10824. Q. Take it that the pillars are 30 yards, and the cut-through are 6 feet wide—would the nature of the strata next to the coal have nothing at all to do with the question of whether the coal would remain up or not? A. They are cut through between the pillars.

10825. Q. That may be quite true—but the question is this, would not the thickness of the pillars required depend very much on the nature of the strata next to the coal? A. Well, it may depend on that slightly, provided very much on the nature of the strata next to the coal.

10826. Q. Then, it does not follow that the same size of pillar would be required in any two mines with the same thickness of strata? A. They are not all the same.

10827. Q. What do you mean by that? A. Taking the strata generally for the South Coast District, it is pretty well all the same. There is not much difference in the nature of the strata.

10828. Q. But we are dealing with a question affecting other strata? A. Which is one reason why we could not make it a hard and fast rule. All pillars are not alike.

10829. Q. Then, in your opinion, would 50 yards be sufficient for the South Coast strata? If you had a 30 yard pillar would that be sufficient to maintain the roof? A. I think the longer we make the pillars the better, on the South Coast.

10830. Q. The better for what? A. To ensure safety from creep.

10831. Q. Have you ever known of any creeps through the pillars being too small here? A. No.

10832. Q. You have not known of any creeps in this district through the weakness of the pillars? A. I have heard tell of one or two.

10833. Q. Where were they? A. South District, I believe, was one. South District, I believe, was another.

10834. Q. Have you heard of any creeps at Mount Kisco? A. No.

3 hours.—A. McDonald, 25 January 1905.

1871. Q Do you know that the pillars at Mount Kears have been driven in this in years past by them?
A Yes, have been driven into one another. A I have heard that.
1872. Q Have you found them even the half of 33 yards? A I have heard that.
1873. Q Not 3 yards, in many places, and yet you have no struts there? A When the covering was very thin.
1874. Q Do you keep the thickness of the covering from the tunnel mouth at Mount Kears? A It might be 100 feet at the tunnel mouth.
1875. Q And what is it now where they are working? A From 400 to 600 feet, I suppose.
1876. Q How long have you had these pillars going in the way you have mentioned here, about 50 yards?
A For a number of years, in some cases.
1877. Q Have you had them going for ten years? A I believe we have had some going for ten years.
1878. Q I suppose you know that you could not have them going for ten years for the distance? You know that under the old Act they could not run more than 20 yards? A We have pillars that were driven under the old Act, that they could not run more than 40 yards thick, at any rate.
1879. Q But you have not had them 40 yards in for half? A Without cut through?
1880. Q Without cut through? A I could not say.
1881. Q You knew that the Act, prior to 1816, would not permit it? A Yes.
1882. Q Do you not know that prior to the passing of that Act you had no real pillars at all? A We had some very large pillars.
1883. Q You do not think there were any over 33 yards? A I could not say for certain.
1884. Q Do you know that at that time they were breaking into one another? A I do not know.
1885. Q What distance do you examine? A The Old Struts.
1886. Q Do you examine for the run in the morning? A Yes.
1887. Q How many places have you got to examine? A About thirty-two.
1888. Q And do you know approximately what area those thirty-two places cover? A I could not say.
1889. Q Would they be half a mile apart? Would the two extremes of the places be half a mile apart?
A Yes, something like that.
1890. Q And when do you begin your examination in the morning? A Four o'clock. I leave the tunnel mouth at 4.
1891. Q You examine those thirty-two places? Do you examine the roadways also? A Yes.
1892. Q You examine all the remaining roadways? A Yes.
1893. Q And what time do you get home? A About ten minutes to 7.
1894. Q And where have you got to be at the tunnel mouth? A At the tunnel.
1895. Q And where have you got to be at the tunnel mouth? A It might be about a mile.
1896. Q How do you do that? A I examine each place for any gas, and the bottom, I take a note of the highest point for the lamp, and two or three examinations along the line.
1897. Q Do you do that in every place? A In every place.
1898. Q Do you mean to tell me you do that in thirty-two places from 4 o'clock in the morning till ten minutes to 7? A I do.
1899. Q And you examine the roadways? A Yes.
1900. Q About what distance do you travel now, in those thirty-two places? How many miles? A I could not say.
1901. Q Do you take any part in examining the waste workings? A Yes.
1902. Q How often do you do that? A Once a week.
1903. Q Do you do it by yourself? A Yes. I have done it in company with the under manager.
1904. Q And do your duties in examining the waste workings take you all over the mine? A No; only those in my district.
1905. Q And what method do you adopt in examining waste workings? A I go into all places that I can get into. I go up on the falls.
1906. Q Do you go in as far as you can get in? A Yes.
1907. Q And this is done regularly every week? A Yes.
1908. Q I suppose you have got reports of these examinations? A Yes.
1909. Q Do you write your report on the state of the working places and the ventilation every morning before the men are allowed to go in? A Yes.
1910. Q Now, in connection with the deposits and the fires, I think you said, in answer to Mr. Robertson, that the deposits really had the form of the walls of the men in their hands? A Yes, they have previously got the form of the men in their hands.
1911. Q Now, in view of that very great responsibility, do you not think it absolutely necessary that they should have some certificate showing their fitness for the position which they have been appointed to? A I believe it is possible for the present men to be better than the men who are past an examination and have the certificate.
1912. Q Perhaps, we will not dispute that still. But do you not think that it is necessary that he should have some certificate, given by a competent authority, to show that that is not? A It is necessary that he should have some certificate of some responsibility, but I should say a certificate by a manager would be sufficient.
1913. Q But do you not think that the judgment of three examiners would give more confidence than the judgment of one? A Yes.
1914. Q And would it not give greater security to have the judgment of three persons than of one, who might be liable to misapprehension? A I do not think a manager would send a man who was incompetent into that position.
1915. Q But I think you have said already that a person who did not know anything at all about gas was incompetent? A Yes.
1916. Q And the person was a deputy? A I do not know anything at all about a deputy being incompetent.
1917. Q But we have it in evidence that you said that a person who did not know anything at all about gas was incompetent, and the person who did not know anything at all about gas was a deputy.
1918. A Yes, I think he said he did not know anything about the composition of gas.
1919. A Yes, I think I will not press the matter in that way.

16791. Q Do you not think it is absolutely necessary that the person, or any person, who is going to be appointed as an examining deputy, should be previously tested, if not tested in a theoretical way? A I think so.

16792. Q As a matter of fact, he should demonstrate his fitness for the position? A I think so.

16793. Q What is that practice adopted in appointing deputies now? A By the Managers, yes.

16794. Q How do you know that? A That is the practice at Mount Kew.

16795. Q Take your own case: what circumstances led the Manager to put you through? A The first time, I was appointed was by the late Mr. MacCabe, and in about six several questions concerning the position.

16796. Q Of course you had a certificate then? A Yes.

16797. Q Well, of course, that in itself would probably be taken as sufficient by any ordinary manager? A Yes.

16798. Q But you have other deputies at Mount Kew who have not got certificates? A Yes.

16799. Q Do you know of any test that the Manager put them to? A I believe that the late Mr. MacCabe put my brother through a test.

16800. Q What test did he put him through? A I could not say.

16801. Q And after all, do you not think, considering the serious responsibility in connection with the position of deputy, which you appear to have realized, that it would be a greater security to have a certificate by these competent persons, at least, certifying to a certain fitness, instead of one? A It may give the men greater security.

16802. Q Now, do you not think that it is absolutely necessary that the greatest measure of security possible should be had that is consistent with a fair examination, in order to ensure the safety of the workmen? A Oh, yes.

16803. Q You realize, of course, the great responsibility these men, the deputies have? A Yes.

16804. Mr. Bruce Smith: I have feared that some of the questions asked by Mr. Hinkle on having said that he had no knowledge of gas. He says that all the knowledge he has is a practical knowledge of underground, and a practical knowledge of looking for gas, which does not involve a knowledge of chemistry. That is a sort of summary by Mr. Hinkle of what the witness had said.

16805. Mr. Hinkle: I believe that that is generally what the witness has said and who has expressed their ignorance of gas and their ignorance of its properties, but it has only been put in that way by them, when the question has been put to them in that way. Some of them have openly said they had no knowledge of gas, and it was only when the question was put to them in other way that they put it in that qualified manner.

16806. Mr. Bruce Smith: Mr. Lough said that a deputy had been appointed who had no knowledge of gas, and then Mr. Hinkle said: "He says that all the knowledge he has is a practical knowledge of underground, and a practical knowledge of looking for gas, which does not involve a knowledge of chemistry."

16807. Mr. Hinkle: Yes, I know they have made that qualification when it has been put in that way.

16808. Q Now, do you think that they should be able to demonstrate their practical knowledge of gas? A Yes.

16809. Q And that they should be entitled to an having a practical knowledge of gas? A Yes.

Further examination by Mr. Robertson:—

16810. Q With reference to the hypothetical case stated by Mr. Hinkle, of a hill falling out overhead and gas upon the men, and endangering men 70 yards apart of a cut through, I suppose you know of the Long wall system? You have said that is the most approved system of coal mining? A Yes.

16811. Q And in Long wall you may have 500 or 1,000 yards of face in a long split? A Yes.

16812. Q And the same thing might happen there, and put not two men, but twenty, in danger, or more? A Yes.

16813. Q Now, I understood from an answer you gave to Mr. Hinkle, that you believed that the old Act did not permit cut-throughs to be driven more than 50 yards apart? A That I used to.

16814. Q Yes? A No. That was not my meaning at all, indeed.

16815. Q I think Mr. Hinkle suggested that? A Yes, he asked me some questions relating to the old Act.

16816. Q That the old Act stipulated for cut-throughs to be 25 yards apart? A Yes.

16817. Q As a matter of fact, the old Act permitted cut-throughs to be driven any distance apart under a certain condition? A As far as I know, it did.

16818. Q That is so, is that right? A Yes.

16819. Q Now, in answer to Mr. Hinkle, you modified your opinion as to the necessity for deputies and about three passing an examination? A Yes.

16820. Q You thought it would give more confidence? A Yes. It would give more confidence to the men if the men knew that the deputies had passed an examination, but it would depend upon whom the examination would be by.

16821. Q Now, assuming that the board of examiners would be the same gentlemen as now act for the examination of managers and other managers—on that I do not say and that the questions necessary to a deputy or whether are personal questions, and a practical knowledge—can you tell me how such a board would examine a candidate's personal knowledge in a case? A It would be very difficult.

16822. Q It is possible, where they have had the opportunity of watching the men, his methods, and his work, over some long period? A They could not do it very well.

16823. Q It would practically only be his book knowledge that they could ascertain? A Yes.

16824. Q Do you, therefore, think that their certificate would give more confidence than the statement of a manager who knows his men, and writes them because of their ability and experience? A No, I do not think it would. A manager who has watched a man's practical work ought to know better how he is qualified.

16825. Q Supposing you are a Manager of a mine, which would you rather have—a certificate or statement from another manager as to a deputy or what from a gentleman, or the certificate of such a board? A I would rather have the one or a practical man rather one.

16826. Q Whose certificate would you rather have? A The manager's or the board's?

16827. Q Yes? A I would take the manager's certificate.

[Witness left.]

Examination by Mr. Thomas Smith.

- 10076 Q. You live at Knebels? A. Yes.
- 10077 Q. When did you come from Knebels, to day? A. I came yesterday morning.
- 10078 Q. Then you have been about Wellesburg all yesterday and all to day? A. Yes.
- 10079 Q. Where did you stay last night? A. I stayed at the "Garden Hotel".
- 10080 Q. And you have been working about this morning, have not you? A. Yes.
- 10081 Q. Are you well to-day? A. Oh, pretty well, as far as that goes. I would like another whiskey if I could get it.
- 10082 Q. Where did you have breakfast? A. At the "Railway Hotel".
- 10083 Q. Really? A. Almost a cocktail, I suppose.
- 10084 Q. Well, you're not in good working order today, are you? A. Pretty well.
- 10085 Q. Could you do a good day's work today? A. Yes, I feel fit enough.
- 10086 Q. Now, I am just going to ask you some questions. How long have you been a working miner? A. About twenty years.
- 10087 Q. And you have never occupied any position except as a miner getting coal? A. No.
- 10088 Q. I think you said you have often seen a blast after a shot? A. I did not say after a shot. I have seen it.
- 10089 Q. When you have got in? A. I did not see it often.
- 10090 Q. How often have you seen it? A. I have seen it once.
- 10091 Q. Have you seen it more than once? A. I might have.
- 10092 Q. And how long after a shot is fired do you go in? A. Very quickly. As soon as it goes off you go in, you generally want to be in it. A working miner, especially, is always in a hurry.
- 10093 Q. The shot is all over, and everything cleared away when you go in? A. No; certainly not. There is something left there.
- 10094 Q. What is that? A. What lights, the gas, of course. How does the naked light light anything? There must be something there.
- 10095 Q. Just tell the Court what happens when you go in. Or when has happened? A. Sometimes we have the light in our hands, and sometimes on our heads. You go in to look at it, and the first thing you get is a blast and you fall back.
- 10096 Q. And perhaps it singes your hair? A. Yes, and your face, too, perhaps.
- 10097 Q. And you have had that happen at Mount Knebels? A. Yes.
- 10098 Q. How long ago? A. About fifteen months ago.
- 10099 Q. Did you report that to anybody? A. Yes.
- 10100 Q. To whom? A. It is not worth talking about. To Nelson, he is dead now.
- 10101 Q. Did you ever find out whether he reported it to a boss? A. No.
- 10102 Q. You never know anything about it? A. No.
- 10103 Q. Now, it is assumed to you more than once? A. Yes.
- 10104 Q. Several times? A. Yes.
- 10105 Q. Did you report it several times? A. Certainly.
- 10106 Q. Have you ever known gas, or anything of that kind, at all events, whatever you may call it, to appear to other persons than after you fired a shot? A. No, I have never seen anything.
- 10107 Q. Have you ever seen anything in the mine, or during your work? A. No.
- 10108 Q. Or when coal fell? A. No.
- 10109 Q. Do you know of other men finding it? A. Yes, I have heard of others.
- 10110 Q. You have often heard of it? A. Yes, at when men go to Knebels.
- 10111 Q. Have you ever heard say of the other men inform anyone of having found gas? A. Yes, I believe I have.
- 10112 Q. Which person? A. I could not be sure, so it is best to hold my tongue.
- 10113 Q. Could you tell me now the way you came out of that mine after you felt that darkness as your eyes? A. Yes.
- 10114 Q. Which way did you come? A. I came out the main tunnel.
- 10115 Q. Straight down to the main entrance to the mine? A. Yes.
- 10116 Q. Then how did you get over to the No. 1 shaft? A. I never went near the No. 1.
- 10117 Q. You did not go as again that day? A. I went to that night.
- 10118 Q. Then, I take it, that, as soon as you could after you noticed this darkness in your eyes, you got into the shaft tunnel and came straight out of the mine? A. When?
- 10119 Q. After you felt the darkness, and after this smoke came, you and your nephew got into the mine tunnel and came straight out? A. Yes; straight out of the mine tunnel.
- 10120 Q. You did not answer anybody that day? A. I never tried to because we could not.
- 10121 Q. You had no difficulty in coming straight out? A. Yes, we had.
- 10122 Q. What difficulty? A. When we came down from the shaft into what we call the No. 4.
- 10123 Q. Can you show us that No. 4 to this place? A. I suppose I could. I am not well up in this sort of thing.
- 10124 Q. There is your place, and here is the No. 1 main shaft tunnel. Would it take long to get into the shaft tunnel? A. Pretty long.
- 10125 Q. How long? A. Almost an hour.
- 10126 Q. To get into the shaft tunnel? A. To get into our working place.
- 10127 Q. But how long did it take you to get into the main travelling road? A. We did not get into the main travelling road.
- 10128 Q. Where did you get? A. Into the main road.
- 10129 Q. How long did it take you to get into the main road? A. Almost an hour.
- 10130 Q. I did not ask you that. How long did it take you to get from your working place into the main road? A. About four or five minutes.
- 10131 Q. Then you came straight out? A. Yes.
- 10132 Q. Then, what did you see? A. I had my reply on my back all the time. As soon as I went out into the mine to stand I picked up Peter Mann's leg, and I put him on my shoulder and carried him on; and I was staggering, and he fell when I fell. Of course, I had a hard time to get out.

Witness—T. Mike, 29 January 1933.

- 10812 Q And you were walking also on the way? A When I got out to what we call old Joe's, where it dips, like.
10813 Q That is No. 4 Right off the cliff? A That is the worst time I had, going into there.
10814 Q Why? A Because I felt worse there than anywhere else. I felt colder, like.
10815 Q Yes, you got out that night and got home? A Yes, home.
10816 Q As a like what day you went in again? A Yes, that night again.
10817 Q How did you go in? A On my feet, of course.
10818 Q I did not suppose you went in in a carriage and pair. Which way did you go in? A On the travelling road.
10819 Q Which travelling road? A The only travelling road in Mount Kembla.
10820 Q No. 1? A There is only one travelling road in Mount Kembla.
10821 Q Do you know the exact distance? A I think so.
10822 Q Do you know the No. 1 Right? A Yes.
10823 Q Is not there a travelling road in No. 1 Right? A Yes; but you must always start at the same place.
10824 Q Did you turn off into No. 1 Right, or go up the cliff-district? A, I went into No. 1.
10825 Q Can you show me which way you went? A No.
10826 Q You are not a cripple? A I am a cripple enough.
10827 Q But you are not a cripple enough for that? A No.
10828 Q Which way did you go? A, Into No. 1 Right. I was silly then.
10829 Q You were silly then? A Yes, and I am silly now.
10830 Q Were you as silly then as you are now? A I do not know.

Cross-examination by Mr. Lyngby—

- 10831 Q How long were you with Mr. Rogers yesterday? A I was not working at all.
10832 Q How long were you with Mr. Rogers at all round here? A, I was not with him at all.
10833 Q Last night? A Yes, last night.
10834 Q Last night you were? A I was not.
10835 Q Not any time yesterday? A No.
10836 Q Did not you see Mr. Rogers in Wollagong yesterday? A I saw him here in the District.
10837 Q Did not you speak to him yesterday? A Well, I spoke to him, but nothing about this.
10838 Q Who else is staying in this hotel with you? A, I could not tell you.
10839 Q Are not there some other beds from Kembla? A No.
10840 Q Had you a conversation with Mr. Rogers about the evidence you were to give? A No.
10841 Q Did not you give a statement? A Not to Mr. Rogers.
10842 Q To whom did you give it? A No one.
10843 Q Do you mean to say that you have not given any statement at all? A I do mean to say that.
10844 Q Were not you asked questions, before you came here, about what you have been asked this morning? A No.
10845 Q Do you know Mr. Wade? A I could not tell whether I have seen him or not. He might be here for all I care.
10846 Q Do you mean to say that nobody has asked you any questions concerning the disaster and yet come in here? A No.
10847 Q Mr. Bruce Smith? I tell Mr. Lyngby that I have a proof of his evidence taken by Mr. Wade.
10848 Q Mr. Lyngby? Did not you sign a statement? A No.
10849 Q Did not you let a statement be taken down in writing? A Not to Mr. Wade.
10850 Q Well, to any person? A Well, many a thousand times, I suppose.
10851 Q I want the last one? A Well, I do not know who he is.
10852 Q How long ago was it? A I do not know. No one takes my statement, I always talk the same words.
10853 Q Yes, I know, but how long ago was it since you gave this statement? A I did not give any statement. I do not think I did. I would like to get whoever is guilty found guilty, and get them punished for it—wherever it is. I have a brother killed. You may convict me, and give me fourteen days' jail, I do not care what you do. I always like to tell the truth.

Examination by Mr. Robertson—

- 10854 Q I want to know was there any smoke after the shot when something went off, which you thought was gun? A Yes.
10855 Q Was there smoke? A Yes.
10856 Q A lot of smoke? A Yes, it came in there in volumes, just where my nephew and I were walking. He was having a beer on the left hand side of the place, and spitting the beer, and I was looking at his light, and his light looked as red as anything.
10857 Q You went into your place after you fired a shot, and something went off? You know you told us that it lit at your light? A That was not there at all, that was in No. 2.
10858 Q Never mind where it was. You went into your place after a shot had been fired, and your light on your head lit something, and you thought it was gun? A Yes. Well, I did not say I thought it was gun.
10859 Q Never mind what it was. Was there smoke in your place then? A Yes.
10860 Q Had the shot done its work? A The shot was broken, and it did not come.
10861 Q The shot had not done its work properly? A I just want to have a look at it to see what it had done, and it looked and went right by us.
10862 Q But the shot had not done its work? A No. It had done its work, only it just happened where the shot was fired, like. Of course, as you say, it had not done its work.

[Witness retired.]

MR. THOMAS JOHNSON was sworn, and examined as under:—

Examined by Mr. Bruce Smith:—

10084. *Mr. Bruce Smith* [I will first examine the witness on behalf of Mr. Wade, and I will then afterwards put any questions to him which I may consider necessary from the departmental point of view.

10085. *Q* What is your name? *A* Thomas Johnson.

10086. *Q* What are you? *A* A man.

10087. *Q* Engaged at Mount Kemble? *A* Yes.

10088. *Q* How long have you been a man? *A* I have been working ever seventeen years.

10089. *Q* And how long have you been working on Mount Kemble? *A* I have been working on Mount Kemble all that time.

10090. *Q* Were you on Mount Kemble at the time of the disaster? *A* Yes.

10091. *Q* Where were you working on that occasion? *A* I was working in the 5th Right.

10092. *Q* The 5th Right or the 5th? *A* The 5th Right, at the time of the disaster.

10093. *Q* Do you remember what part? *A* No.

10094. *Q* Your name was Kensington? *A* Yes.

10095. *Q* What was the first indication you had that anything had taken place? *A* Of the disaster?

10096. *Q* Yes. *A* Well, the first was a sort of whining in the air, a humming noise.

10097. *Q* That is the first you experienced? *A* Yes.

10098. *Q* Did you say anything to your mate? *A* My mate was not working that day.

10099. *Q* Then you were alone? *A* Yes.

10100. *Q* What were you doing? *A* I was filling my ship.

10101. *Q* And you saw anything at that time? *A* No sir, I saw nothing.

10102. *Q* No difference in the air? *A* No.

10103. *Q* No smoke? *A* No smoke, or anything.

10104. *Q* Just three signs in the air? *A* In the air.

10105. *Q* Was there any movement in the air, more than usual? *A* No, I never took notice when I heard it.

10106. *Q* What did you do? *A* I stopped, and then I ran down to the town, after this heavy fall.

10107. *Q* After which heavy fall. You have not told me of that? Did you hear anything? *A* Oh yes, I heard a very heavy fall.

10108. *Q* Before you felt this whining? *A* No, I got the whining in the next first.

10109. *Q* And then you heard the noise afterwards? *A* Yes, the noise followed.

10110. *Mr. Bruce Smith* [Q] When you say "a heavy fall," you mean a noise? *A* A noise. I did not know whether it was a fall, or what it was at the time.

10111. *Mr. Bruce Smith* [Q] About how long after you first felt this whining in your ears did you hear the fall? *A* I believe it may have been a minute, or more so I can tell you; but it seems very quickly after the whining.

10112. *Q* Did you know then what that noise was, or did you find out afterwards? *A* Well, I found out afterwards.

10113. *Q* Then I may take it that at the time you simply felt this whining in your ears, and a minute afterwards you heard this great noise, but you did not know at the time what it was? *A* No, not at the time.

10114. *Q* What did you do? *A* I ran down, and got into the dock—[Mutually that the light went out].

10115. *Q* You ran down until you came to the turn? *A* Yes.

10116. *Q* Do you mean the cut through leading into McKinley and Leake's dock? *A* No, to the left of that.

10117. *Q* You went to the left of that down the cut through? *A* Yes, through the road the docks go up.

10118. *Q* You went right down the dock until you came to the rope road? *A* No. We went straight up the dock leading. When I came down my head I turned to the left through the first cut through.

10119. *Q* Did you go against the air or with it? *A* We went with the air coming in our faces.

10120. *Q* Then you went to the left? *A* Yes.

10121. *Q* Then how far did you go before you went down to the 5th Right? *A* We were working in the 5th Right—[Merrily on the 5th Right course].

10122. *Q* Your head ran up a considerable distance from the 5th Right rope road? *A* We ran up about 500 yards until we came on to the rope road.

10123. *Q* Did you get on to the rope road at once, or did you go through some cut through first? *A* We went along, I believe it was, the dock leading.

10124. [Witness then explained to Mr. Bruce Smith on the map that he went round the first cut through on the left on the way out of the mine, passed a number of berths on the left hand side, then went down to the 5th Right rope road, and along the cross cut leading rope road to the daylight leading.]

10125. *Mr. Bruce Smith* [Q] Did you meet anybody going along past the other berths? *A* I met Charlie Smith.

10126. *Q* Which way was Charlie Smith going? *A* I could not say whether it was Charlie Smith who came to my head and called me, and then I ran, or whether it was Jack Leake.

10127. *Q* Before you went out of your head, Charlie Smith or Jack Leake came to your head? *A* They shouted out to me, I could not see them.

10128. *Q* What did they shout out? *A* They told me to come out at once.

10129. *Mr. Johnson* [Q] Where did you meet Charlie? *A* I met him afterwards, but it would be about 50 yards or more after I got through the cut through out of my head.

10130. *Mr. Bruce Smith* [Q] Did you meet them, or were they going the opposite way? *A* They were stopped there, so I told them the way to go.

10131. *Q* You knew the daylight tunnel? *A* Yes.

10132. *Q* Was that a help to you? *A* Yes, it was.

10133. *Q* Were Leake and any others with Smith? *A* Yes, but I could not tell you their names.

10134. *Q* I take it that Leake and others were waiting at the end of a berth? *A* Yes.

10135. *Q* You showed them the way out? *A* I said, "The Gods will get out on the baggage road."

10136.

Witness—T. Johnson, 29 January, 1933.

- 130713 Q Did you show them the way out by the daylight tunnel? A [I told them to get out by the daylight tunnel].
- 130714 Q Did you know the daylight tunnel? A Yes.
- 130715 Q What caused you to go out on any occasion that way? A, Mr. Frost was there to stop us.
- 130716 Q Then you went out by the tunnel with these men? A, Yes, and Mr. Adam Frost, junior, who was sitting there by us. We was on the backside road.
- 130717 Q Did he take you out then? A No, he just told us which way to go out.
- 130718 Q First of all you heard a booming or the noise? A Yes.
- 130719 Q Then you heard a full a minute afterwards? A Yes.
- 130720 Q Then London, or his sons, called out to you to get out? A Yes.
- 130721 Q And you came down your back and went along the back-sidings, leaving the other back on your left, and then you met these men, and then you went along the backside road and met Frost, and he showed you the way out? A He told us the way to go out.
- 130722 Q What was the noise like when you heard some time after the shooting? A It put me in mind of a very heavy fall on a hard.
- 130723 Q Was the noise like anything that you hear outside the mine? A No, without it was a heavy, deep from the Heavens.
- 130724 Q Thunder, you mean? A Yes.
- 130725 Q Was it anything like thunder? A I imagine it was.
- 130726 Q But did you think it was thunder? A No.
- 130727 Q But it was like thunder? A It was a very heavy fall.
- 130728 Q How many parts of the mine have you worked in? A I have worked in very nearly all the sections in it.
- 130729 Q Have you ever come across gas in that old Right District, or No. 1 District? A No.
- 130730 Q And you have come across black-damp? A Yes.
- 130731 Q And how do you distinguish the black-damp? A My light would not burn. Well, when I say it would not burn, it would have black, but not as it might be so.
- 130732 Q Did you ever report to the deputies what you had seen? A It would not want much reporting, because he was there every day to see for himself.
- 130733 Q That is the black-damp? A Yes.
- 130734 Q Did you show it to him? A He could see it too.
- 130735 Q How high would that affect your lamp from the floor? A We used to have it just about up to where [indicating the height of the chest]. You could see it on your head. You had to put it on a prop.
- 130736 Q Do you mean to tell me that the light would go out if you placed it on your head? A It would not burn. If you turned your head quickly it would go out.
- 130737 Q Then it was up above your mouth? A I do not know, but it would not burn if it was on my head.
- 130738 Q Did you feel any effect in breathing? A No.
- 130739 Q Did you ever see anything else about mine first, when you went back into your head? A I have seen nothing in the old left.
- 130740 Q I am asking about any part of the mine: did you ever see gas in any part of the mine? A Only in No. 1 Right mine heading in the Shaft District.
- 130741 Q How long is that ago? A That will be twelve years. It might be more. I could not say rightly.
- 130742 Q What time did the gas take then? What happened? Was it an explosion? A No.
- 130743 Q You see, I am trying to get information from you. I am only a town chap, who does not understand it? A I do not see it until my light caught it.
- 130744 Q Your light caught it? A Yes.
- 130745 Q Did it burn? A It burned in the coal a bit, and then it had itself out half again.
- 130746 Q Did it burn you? A No, it went over my head.
- 130747 Q How often did you see that happen? A I have only seen it once or twice.
- 130748 Q How many times have you seen it elsewhere? A I have seen it once or twice. I believe it would be the old left, or old left, in No. 1. I saw a slight touch of it there one morning.
- 130749 Q How long ago? A It would be shortly after the time I left the heading and came back again.
- 130750 Q Do you mean about the disaster? A No.
- 130751 Q You mean shortly after you were in No. 1 Right? A Yes.
- 130752 Q And does it mean years ago? A Yes.
- 130753 Q What is the latest time you have seen gas in the mine? A The last time I have told you about.
- 130754 Q And you have never seen gas since then? A No.
- 130755 Q At the stage Mr. W. B. Frost attended to take sheltered notes of the witness and proceedings.)
- 130756 Q Have you had experience of lighting smoke after firing a shot? A I have seen my men do it.
- 130757 Q You have seen men light smoke after firing a shot? A After firing a shot, if it had not done its work, but had blown down or blown out on the top.
- 130758 Q You say, "If it had not done its work"? A Yes.
- 130759 Q Well you describe what happened on this occasion where your men went to see what had happened at the time of a shot which had not done its work? A You could only see the smoke.
- 130760 Q What happened? A My men went in my view, had happened and he saw the last, and the caught and went out again. After that you could not light her.
- 130761 Q Was there an explosion? A You can tell it what you like.
- 130762 Q What colour was it? A Red, as far as I can tell you.
- 130763 Q What colour was the flame when you saw gas? A It went as quick that I never looked. I stopped down.
- 130764 Q You mean the opinion that if anything happens after a shot it is the powder smoke going off? A That is my opinion, I do not know what it is or might be not.
- 130765 Q Did that occur of us? A Yes, it is the only time I have seen it—it is the only time I have seen the work done.
- 130766 Q Do you not light it? A I never played with it.

- 11089 Q. With that smoke from? A. When a hot shot is fired, and the smoke goes up, and you get a light in it, it will.
- 11090 Q. You have seen smoke fall? A. Yes.
- 11091 Q. Where? A. Nearly all over the pit.
- 11092 Q. A large amount? A. I have seen some very heavy falls.
- 11093 Q. Falls of yards or over acres? A. I have seen them cover a good few yards, but not acres.
- 11094 Q. You say there was dust with it? A. A sort of white dust.
- 11095 Q. What effect does it produce on anything of which it settles? A. I do not suppose it takes any effect.
- 11096 Q. What colour is it? A. White.
- 11097 Q. Is it as heavy kind of dust? A. Yes, you see it on the rib.
- 11098 Q. On that occasion when you found gas, twelve years ago, who were your deputies? A. Deane Brown and Willie Nelson.
- 11099 Q. Did you inform them? A. I informed the under manager, Mr. Rogers. That was the time I found gas in No. 4.
- 11100 Q. I think some reports was put up on that occasion? A. That was in No. 1.
- 11101 Q. Where you heard this warning noise, how did the air behave? A. Halted.
- 11102 Q. What was it like? A. The hot air came with this terrible noise.
- 11103 Q. Do you know what distance you were from the 30 acre gas? A. No, I can give you no idea.
- 11104 Q. But you know you were 600 yards away? A. Yes.
- 11105 Q. You heard the noise distinctly? A. Yes.

Cross-examined by Mr. Lymington—

- 11106 Q. Did you get any word just after the disaster? A. No.
- 11107 Q. When you reported gas to Mr. Rogers, did you make any remark about it? A. I told Mr. Rogers that there was gas there, and he ordered safety lamps to be sent the work with.
- 11108 Q. How long were the lamps in use? A. Until we finished candles or three shifts.
- 11109 Q. Did any one else use safety lamps? A. Only me and my mate.
- 11110 Q. Do you know whether any other person had been ordered to use safety lamps before that? A. No, I did not.
- 11111 Q. Can you say whether Mr. Rogers knew, before you reported it, that gas was given off in Kewdale mine? A. I cannot say whether he knew or not.
- 11112 Q. I suppose you have some theory as to the cause of the disaster? A. I know nothing about it. I know I was in it, that is all I know.
- 11113 Q. You cannot say whether it was caused by an explosion of gas? A. I cannot say.
- 11114 Q. Although you have not discovered it very often, I suppose you have heard the miners talk about gas? A. I never heard the miners speak about it. Only on the two occasions I found it myself.
- 11115 Q. How often have you known the air to be covered in Kewdale mine, because of a westerly wind? A. Once or twice in my knowledge.
- 11116 Q. How long ago? A. I can give you no idea—a man never thinks about these things.
- 11117 Q. During the last twelve months? A. Long before that.
- 11118 Q. During the last three or four years? A. You can get it at that.
- 11119 Q. For how long was the air covered? A. Only while the wind changed about the furnace.
- 11120 Q. How long—an hour or half an hour? A. I can give you no idea.
- 11121 Q. Roughly speaking? A. I cannot tell you.
- 11122 Q. You remember the conditions of the air being reversed a couple of times, but cannot remember whether it was reversed for a day or an hour? A. You may say for an hour or so, but not for a day.
- 11123 Q. Have you ever known the air to be covered from any other cause? A. No.
- 11124 Q. Have you never known the furnace to be defective? A. I never noticed it.
- 11125 Q. Have you not had the smoke standing in your own place for want of air? A. If the furnace has not been up—that is what would cause that.
- 11126 Q. Have you not had the smoke left in your place for two or three hours? A. No.
- 11127 Q. For how long? A. Oh, for twenty minutes or half an hour—thus on a long time.
- 11128 Q. Have often been you led off into the twenty minutes? A. Not many times.
- 11129 Q. You are still running coal? A. Yes.
- 11130 Q. In your place dusty? A. No.
- 11131 Q. Is it wet? A. Just a little moisture.
- 11132 Q. Is it now watered? A. Only the more heading.
- 11133 Q. Who does the shaft? A. Nobody.
- 11134 Q. Do you not live there? A. No.
- 11135 Q. Have you not fired shots since the disaster? A. No, I have been on a pillar-work; but now I am in a heading.
- 11136 Q. Would you approve of legislation and that free holding certificates of competency by one witness? A. That has nothing to do with me. I know nothing about that.
- 11137 Q. Do you think it would be an extra precaution? A. That ought to be a Government affair. It is not my business.
- 11138 Q. Do you not think that, as an extra precaution, deputies should undergo an examination? A. Well, I think they should pass an examination. It does not do for any one who is able to take on the work. They should pass an examination like anyone else.
- 11139 Q. That your experience is that anyone takes it? A. I did not say so.
- 11140 Q. Do you know a young man named Freylin—do you think he is competent? A. I cannot say anything about him at all.
- 11141 Q. With regard to the use of safety lamps. Do you think the Government Inspector should have power to order them, if necessary? A. I can not tell you in these kind of things at all.
- 11142 Q. Oh, well, I will not trouble you about those recommendations, except this one—Do you know how many rods there are out of the Kewdale mine? A. I know about four.
- 11143 Q. Did anybody show them to you? A. No.
- 11144 Q. You do not know that road cut by the daylight heading? A. Oh, don't I?

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11142. Q I thought Frost showed it to you! A He had no need to show it to me. I am working by the daylight heading now. I told the men to get on the road, and to get out by the daylight heading.
 11143. Q Were you the only one who knew that too? A I expect the others knew it.
 11144. Q Did you give a statement of your evidence to any person? A No.
 11145. Q Did you not make a statement? A I went across to Mr. Rogers.
 11146. Q When? A One night, about a week ago.
 11147. Q Who was present? A Here I get to answer such a question.
 11148. Q Why do you object? A I do not know whether I should answer it.
 11149. Mr. Winter. There is no objection to the question being asked.
 11150. Answer. Well, there were a couple of gentlemen there, Mr. Wells was there.
 11151. Mr. Knight. Q Is there any law on it? A I do not know. I cannot say.
 11152. Q Did you put anything in your statement, which was not true? A No, I did not.

Examined by His Honor.—

11153. Q The first thing that you noticed was a heading? A Yes.
 11154. Q How long after that was it when you heard a noise, which you say sounded like a fall? A It would be about a minute.
 11155. Q Do you think it was as long as a minute? A The heading came first, and the second followed. It was a bit distant at the time.
 11156. Q Was it like one sound, or was it a rumbling sound? A It was like one heavy fall.
 11157. Q When you say that you felt a change like hot steam coming up, was that before you heard the sound? A The heading came, and the fall, as I thought, went the hot air into the place.
 11158. Q The fall and the hot air seemed to come together? A I think so.
 11159. Q And you say it was like one single heavy sound? A Yes, like one heavy sound.
 11160. Q Not a rumbling sound? A No—just one sound. It came just like a load falling in with a heavy fall.
 11161. Mr. Bruce Smith. One theory would be that the fall was the effect, and not the cause, of the explosion.
 11162. Mr. Winter. I know that.
 11163. Mr. Robinson. The fall could not possibly be heard by this man.
 11164. Q Do you not think that there might be a little mistake as to how long there was between the first coming of the heading in your case and the second? A That is what I remember, because I was dead at the time. That is what I put it down to.
 11165. Q Were you shivering at the time? A I was getting. The heat came, and the heading.
 11166. Q Did the heat come before the sound? A They seemed to come together. It came like a hot wave; there was not much difference between the three at the time. Just about a minute.
 11167. Q A minute is a long time! A Oh, no, it might not be that time.
 11168. Q Now, tell me when you took a minute in it. (His Honor looked at his watch.) A I am not going to say that.
 11169. Q And you say? A A man as that day would not consider whether it was a minute or two phases.
 11170. Q I want to know how long you think it was? A I am not going to take that on at all. I will go as near to the matter as my memory will allow me, but I will not go any further.
 11171. Q Now, you say the fall, put your hand down firmly on the desk; raise it up and put it down again; and be there to the same distance of time apart as there was between the heading and the sound. Place your hand on the desk once for the heading and another time for the sound. A I cannot say anything about that. I think it would be about a minute.
 11172. Q Now just do what I say, it is easy! A It is easy enough to do it. I come here to tell the truth about it.
 11173. Mr. Bruce Smith. Q Put one hand down when the heading took place, and another when the second came? A There was a heading, and if you had been in it you might have remembered it better than me.
 11174. (Mr. Bruce Smith asked his hand from the table, and said, "Remember that in the hearing, tell me when the second came," the witness replied in the affirmative, and Mr. Bruce brought his hand down on to the table, the space of time occupied being a few seconds.)
 11175. Mr. Robinson. Q Are you sure that you heard the sound after the heading? A Yes.
 11176. Mr. Winter. Q I suppose you were rather exhausted at leaving us? A Yes, it frightened us.
 11177. Q And you thought it time to leave? A Yes, when the after-damp came up. We put it down as an explosion. When we got to the bridge road, we got into good air, because we went the way the air was coming in from the daylight heading, and that got the after-damp back.
 11178. Mr. Robinson. Q You and after the beginning of your conversation that you are no difference in the way—no movement? A I did not stop to look. I cleared out.
 11179. Q You said that there was no movement in the air—no difference. Now you say there was a rush of hot air? A I took no notice of it—unless it came from the hot air coming up the road.
 11180. Q Then you said at the beginning, that there was no movement in the air, was wrong? A I suppose so.

Examined by Mr. Robinson.—

11181. Q Did the air blow your light out? A I think the running put it out.
 11182. Mr. Winter. Q You were running against the wind? A I was running the way the after-damp was coming. Probably it was my running that put the light out.
 11183. Mr. Bruce Smith. Q Did the air continue to come the same way after you felt it hot? A I cannot tell you.
 11184. Q It was not warm? A When the hot breeze came I ran.
 11185. When you ran, the air was coming the right way? A From the daylight heading.
 11186. Mr. Robinson. Q Did you feel it coming from the north daylight heading? A Yes, and it was a little sultry until we got to the bridge road.
 11187. Mr. Robinson. Q Which way do you say the air was coming? A The air was coming in our face, it was a hot wind, but the air from the north daylight heading pushed the other air back.

[Witness retired.]

11191. The witness, John Morrison, was called; but, there being no appearance, the Commission, at 12.45 p.m., adjourned until 2 p.m.

11192. The Commission resumed at 2.15 p.m., and the name of the witness, John Morrison, was called outside the Court, but there was again no appearance.

11193. His Honor said that, there being no witnesses in attendance, the sitting of the Commission would be adjourned until the following Monday, when it would meet at the Land Court, Darlinghurst, Sydney, at 2 o'clock.

MONDAY, 2 FEBRUARY, 1933

[The Commission met at the Land Appeal Court, Darlinghurst.]

Present:—

C. E. R. MURRAY, Esq., D.C.J. (PRESIDENT).

D. A. W. ROBERTSON, Esq., COMMISSIONER. | D. FITCHER, Esq., COMMISSIONER.

Mr. Bruce Smith, Barrister-at-Law, instructed by Mr. Wood, Crown Solicitor's Office, appeared on behalf of the Crown.

Mr. A. A. Atkinson, Chief Inspector of Coal Mines, assisted Mr. Bruce Smith.

Mr. A. A. Lynch, Solicitor, appeared on behalf of—

(a) the representatives of deceased miners, widows, &c., (victims of the explosion);

(b) the employees of the Mount Kosciusko Colliery (miners, washers, &c.); and

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Mr. Y. Corbin, Solicitor, appeared on behalf of the Mount Kosciusko Coal and Oil Company (Proprietors of Mount Kosciusko Mine).

(Mr. J. Gwifish, Secretary to the Commission, was present to take shorthand notes of the evidence and proceedings.)

Mr. JOHN ROBERTSON, previously sworn, was recalled, and further examined, as under:—

Examination by Mr. Bruce Smith:—

11194. Q When you gave your evidence to Mr. Wade the other day, you spoke of a number of objects being driven sideways and sideways down the 4th Right, did you not? A Driven sideways.

11195. Q And some sideways—both ways? A I think most of those I spoke about were driven sideways.

11196. Q I did not say that. I say that you spoke of some being driven sideways and some sideways? A Well, I cannot remember.—[Interposed.]

11197. Q Did you mention to the Commissioners any indication of things going down towards the 4th Right from the top of No. 1 heading? A None in the mine tunnel. I never mentioned it, anyway, to the Commissioners.

11198. Q Now, in giving your evidence the other day to Mr. Wade, did you speak of indications of things going from the end of No. 1 level down the travelling road towards the 4th Right? A No.

11199. If anything did go to that direction, it would be quite contrary to all the things which you mentioned in your evidence? A No.

11200. If any such thing were there, it would be quite contrary? A Yes.

11201. Q To the house which you spoke of? A I was never asked any question.

11202. If anything was driven down from the end of No. 1 heading, down the travelling road towards the 4th Right, that would be quite contrary to all the things you spoke of? A No, it would not be contrary.

11203. Q It would not be contrary? A No.

11204. Q It would be going along from No. 1, would it not?

11205. Mr. Atkinson: I think it would be better to call it outwards and towards, sideways and sideways.

11206. Mr. Bruce Smith: Q Yes. It would be going sideways, would it not, if it came from the top of No. 1 heading? A I do not quite understand.

11207. Q I say, if anything were driven from the top of No. 1 heading down towards the 4th Right, sideways, it would be in the contrary direction to those things which you spoke of the other day? A Yes.

11208. Well, was there not before the disaster a door on No. 1 back heading, just sideways of the 4th Right? A Yes.

11209. Q The door was surrounded by timberwork, was it not? A Timberwork.

11210. Q Was not that timberwork driven sideways, down to the 4th Right? A Yes.

11211. Q Now, there were two stoppages, were there not, on the out-throw, sideways of that door, which I have mentioned? A Yes.

11212. Q Were not they surrounded by timberwork? A Yes, they were stopped up.

11213. Mr. Atkinson: Which are you referring to?

11214. Mr. Bruce Smith: The two set-throw immediately sideways of that door which I have referred to.

11215. Mr. Atkinson: I understand.

11216. Mr. Bruce Smith: Q And those two stoppages were in the middle of those two out-throw? A No.

11217. Q How far from the middle? A They were nearer the side tunnel.

11218. Q What is the whole distance across? A Minors' yards.

11219. Q How far were they from the mine tunnel? A They were 3 or 4 feet from the mine tunnel; but I could not say what width [meaning distance] they were.

11220. Q Were they not blown from the travelling road to the mine tunnel? A One of them—the first one.

11221. Q That is the matter to the 4th Right? A The matter to the 4th Right.

11222. Q The matter to the 4th Right was blown from the travelling road to a westerly direction? A Into the mine tunnel.

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Wrenn—J. Harrison, 3 February, 1908.

- 11193 And the one above was driven from the main tunnel into the sounding road? A No.
- 11194 Q What do you say? A Well, I say just this, the corner of a hill into the main tunnel.
- 11195 Q What way was it in relation to its original position? A Just the corner fell into the main tunnel.
- 11196 Q It fell in the same direction as the other one? A Yes.
- 11197 Q Only one was blown right in, and the other fell in the same direction? A Yes.
- 11198 Q Now, you remember the meaning of the disaster—before it all occurred? A Yes.
- 11199 Q That evening you happened, did you not? A Yes.
- 11200 Q I want to know from you whether you went up to the entrance and of No. 1, where it was found dead?
- 11201 A I do not understand the question. Do you want to know if I went through the fence?
- 11202 Q Yes. Did you go through the fence and entrance? A No.
- 11203 Q Is the statement made by Mr. Rogers right? "The door at the top of No. 1 Right was put three hours there was no one working up there." The lowering was up to the face of that place. No. 1 heading had been standing for six or eight months? Is that right? A I could not say how long it had stood.
- 11204 Q It had stood for more considerable time? A Yes.
- 11205 Q Did you hear Mr. Rogers give the evidence at the request? A No.
- 11206 Q He said: "There was no reason for not inspecting the 20 or 30 yards beyond the fence at the top of the No. 1 Right, except that there were no men working there." That is true? A I never accepted it, and there were no men working there.
- 11207 Q How long before that time had you requested it? A I was sent there—came up in those headings.
- 11208 Q Only once beyond the fence? A Beyond the fence.
- 11209 Q How long before the disaster was that? A I cannot say.
- 11210 Q Was it hours, or days, or weeks? A Oh, I was just away on the job at the time—just away started. It was weeks before.
- 11211 Q About weeks? A Some weeks, yes.
- 11212 Q Do your knowledge had any communication been made of the No. 1 heading, the entrance of it, beyond that time? A Yes. William Nelson told me—[interrupted].
- 11213 Q When did he tell you?
- 11214 Mr. Curtis: Would that be evidence?
- 11215 Mr. Bruce Smith: I do not want it, but I think it would be fair to get it.
- 11216 Mr. Nelson: Nelson is dead. I think we should have it.
- 11217 Mr. Nelson: Another man was with him who is alive.
- 11218 Mr. Bruce Smith: Q When did he tell you? A On the 19th.
- 11219 Q Was there any man with you? A Willie Hay, and Johnnie.
- 11220 Mr. Laywell: I object to that. One of the witnesses is alive, and can be called.
- 11221 Mr. Nelson: That is evidence given by Maurice of what Nelson told him. The other man was only one of what was said by Nelson to Maurice.
- 11222 Mr. Bruce Smith: Q Was Hay with Nelson at the time Nelson told you, or was he with Nelson at the time Nelson went to examine this place? A At the time Nelson went to examine it.
- 11223 Q Where is he? A At Mount Kentucky.
- 11224 Q With the exception of that visit by Nelson and Hay, you know of no inspection of that place for a considerable time before the disaster? A No.
- 11225 Q Had you ever mentioned to me that the heading was in good order beyond the fence? A No, never; only the one I was up there.
- 11226 Q So that, for all you know, the heading might have been down? A Quite possibly.
- 11227 Q And that might have been just the sort of place for the accumulation of gas, for all you know? A I did not know. I never examined it.
- 11228 Q You said the other day—at least I understood you to say—that your car was found in the 4th left-heading road? A Near the 4th left.
- 11229 Mr. Bruce Smith: I thought so.
- 11230 Mr. Nelson: Mr. Bruce Smith, if I strike me, so far as that evidence, which has not been given, is concerned, that, for the purpose of showing that Maurice, in a certain extent, did his duty, it may be proved that his superior officers, or some one else whose duty it was to make examinations, had indicated him of the making of a correct examination at certain times, because it would be upon that very information that he would possibly, properly as otherwise, proceed in not making an examination himself.
- 11231 Mr. Bruce Smith: I would be very glad to ask him, but Mr. Laywell objected to bringing that out.
- 11232 Mr. Nelson: I have no objection to allowing that.
- 11233 Mr. Bruce Smith: Q Tell me when Nelson first told you that he had made that examination? A It was on the Monday night.
- 11234 Q Let us get the date first? A It would be about the 51st.
- 11235 Q How long before the disaster? A It was on the 51st that we examined, and it was on the Monday after.
- 11236 Mr. Nelson: Q The 19th July? A Yes.
- 11237 Mr. Bruce Smith: Q According to the statement he made to you he examined on the 19th, and then he told you on the 51st, the Monday? A Yes.
- 11238 Q That would be ten days before the explosion? A Yes.
- 11239 Q Did he tell you anything about that heading beyond that he had examined it? A I would like to give a little explanation of it. There was a major being done in the furnace, and the furnace was out, and he went round to examine all the highest parts of the work.
- 11240 Q He told you? A Yes. The furnace was out, and he went and examined all the highest place.
- 11241 Mr. Bruce Smith: Q You know, yourself, that the furnace was out? A Yes.
- 11242 Mr. Bruce Smith: Q Did he name these "highest places"? A He named the main heading as one.
- 11243 Q That was ten days before the explosion? A Yes.
- 11244 Q Did he say anything to you about your examining it? A No, he did not say anything to me about examining it.

11174 Q Do about not examining it? I Oh, I was not understood to examine it. It was understood that I was not to examine it.

11175 Q What do you mean by being understood, what was the cause of the understanding? A Well, of course, my examination is the examination of all the working places unless it is my monthly examination.

11176 Q And because work had ceased then you would to examine it? A Well, of course, the men who was there before we did not examine it either, and he went along and showed me how to examine the place.

11177 Q That, and the fact that you were only required to examine the working places, led you to believe that you had not to expect that place? A Yes, in the morning response.

11178 Q Then, as far as you know, it was an accident for two days before the explosion, either morning or night? A Not in my knowledge.

11179 Q Now, I am asking you about your own—you say, it appears in the notes, that you found him in the 4th left travelling road, near the main tunnel? A I did not say I found him. I say that is where he was put. He was found there.

11180 Q He was found in the 4th left travelling road, near the main tunnel? A No, he was in the main tunnel, just right opposite.

11181 Q Opposite the 4th left? A Yes.

11182 That is not quite correctly reported, then, in the notes in para. 341? It is rather a matter of importance, because the man's body was one of the bodies that might be of importance. It appears that he was found in the 4th left travelling road, near the main tunnel?

11183 Mr. Stevenson I I see it has quite the opposite, that he was found in the main tunnel near the 4th left.

11184 Mr. Brown Smith I Yes.

11185 Q Is that right? A Yes.

11186 Mr. Brown I And here, in another place, it is "found in the 4th left near the main tunnel."

11187 Mr. Brown Smith It is just reversed. I wonder there are not more of the same kind.

11188 Mr. Brown I Q Was he just about the corner of the two, just where they met? A That is what I have been told.

11189 Q You did not see him? A I did not see him. I passed the place, but I did not go and see. I know he was there.

11190 Mr. Brown Smith Q You said the other day that Dargay was found on the 5th left—was that correct? A No.

11191 Q Is it not a fact that he was found on No. 1 main level? A Yes. There is on 5th left is the mine.

11192 Q There is a cut through there that I thought perhaps you would call the 5th left, but he was really found in the main level? A Yes.

11193 Q Now, was not between the first and second stoppage on the main level—as near as possible half way between the first and second stoppage along the 5th right? A Yes.

11194 Q Just along of the cut through with the two rails round it on the plan, half way between the first and second stoppage? A Yes.

11195 Q You spoke in your evidence the other day of that shirt that you said belonged to Yost? A Yes.

11196 Q You do not know where Yost left his shirt that day? A I know where the rest of his clothes were found. That is the only thing I can go by.

11197 Q You do not know where he left his shirt that day, do you, of your own knowledge? A No, I do not know exactly where he left his shirt.

11198 Q But I understand you found him short apart from the rest of his clothes? A Yes.

11199 Q I do not think you told us where the other clothes were? A No. I should not recognize the same, I think I put the same into his hand, put on the edge side. [Witness then pointed out on the plan to Mr. Brown Smith and Mr. Stevenson the place where the shirt and the other clothes were found.]

11200 Q What did the other clothes consist of? A A coat and waistcoat, and so all little belonging to him.

11201 Q I understood the waistcoat and the all little were found in his hand? A They were found in the line of suit of single opposite his head, just in the corner. The coat and waistcoat and the all little were together.

11202 Q Then you found them all together? A Yes.

11203 Q Different from the shirt? A Yes.

11204 Q Then you found the shirt in his hand, and you found the coat and waistcoat and all beside up that cut through to the left? A I found his shirt in the line of cut through further in past his head, about 45 yards, in the same line of cut through.

11205 Q And you found the coat and waistcoat just in the corner of his hand and the cut through? A Yes.

11206 Q And you found the shirt further in the cut through, how far? A Some 14 yards.

11207 Q Now, I cannot quite understand, from the evidence you gave the other day, in what position the body, which you found sick in the prop, was put away. You found it stuck in this that [Heads and hands at right angles]? A Yes.

11208 Q Suppose it were drawn out like that [Heads and hands at right angles to each other] which way would it be pointing? A Just give it to me and I will show you. [Heads turned to witness, who indicated the position in which he found the body in the mine with Mr. Brown Smith and on opposite page 35 to the Court.] Then is going in the line of cut through.

11209 Q The same way as the shirt? A Yes. It was in like that [Heads at right angles to body], and the body was back [indicates a position] of the body, and the hands were bent down.

11210 Q Which side was it? A The back turned straight from the prop, but still, when you look it over, it seemed to be bent, and then straightened up again.

11211 Q Mr. Stevenson I Suppose that body pointing away [on back up pointing away in the Court] in the cut through? A Yes.

11212 Q And then the [the upright prop] is the prop? A Then it was in that way [indicates].

11213 Mr. Brown I Q Which way and which way? A [Witness pointed out the position on the plan].

11214 Q Mr. Brown Smith I Q Something like that [indicates]? A Yes.

11215

11310. Q Away from No. 1? A Yes, you are facing the jeep now, and you are looking from No. 1 and the heads were in that direction.
11311. A. No. 1? Q Had the heads been fired from the No. 1? A It seemed to have been fired from No. 1.
11312. Mr. Brown Smith. Q So that the heads were really blown in a westerly direction? A Yes.
11313. Q I think you said you had no idea whose heads it was? A I tried to find out, but I could not find out, what it was. I got Alvin's heads and gave it to his wife.
11314. Q And therefore this was not lost? A No. It might have belonged to the car. I haven't looked over it. I do not know whether the car had one.
11315. Q Now, you said then—I will just read a bit of the sentence before it so that you will know what I am coming at (see page 356). Speaking of Morris' working place, you were asked "Before the shooting was there any car over there?" and you said "Yes." Then you were asked "On Morris' side?" and you said "On the cut-through between the two headways on the side near Morris'?" A On the westerly side.
11316. Q I only want to read that to you. You were asked "Was the car over led from that particular car over across the cut-through to Morris' place?" And you said "Yes." You were asked was the car over there?" and you answered "Yes, on the side of the cut-through nearest to Morris' working place." You were then asked "That is on the side running up to the back heading?" and you said "It was a corner down, and it was across the mouth of the cut-through." You were then asked "On the back heading, as on the front heading?" and you said "Yes." The next question was "From that particular corner, across that cut-through, the car was carried into Morris' working place?" and you said "Yes." That was put to you by Mr. Wade, and you simply said "Yes." Now, I want to know how do you know that the car was carried into Morris' working place? How do you know that that particular corner was carried into Morris' working place across the cut-through? A I did not say it was carried into Morris' working place.
11317. Q Now, I will read the question and answer. Mr. Wade said that to you "From that particular corner, across that cut-through, the car was carried into Morris' working place?" and you said "Yes." And then I said "The same corner?" and you said "Yes." Now, I ask you how do you know that that was the same corner? A What I said was this, if your Honor will allow me to explain: there was a corner across the mouth of the cut-through near the back heading, and then the car was carried into Morris' place, and that corner, and the corner opposite the back heading, were thrown up the back heading, and the corner was lying up against the side in Morris' place.
11318. Mr. Brown Smith. Q Now, how can you get a little bit mixed between the meaning of the word "corner," and the meaning of the word "corner?" A When I speak of corner being carried to Morris' place, it was carried up, how it was put up sideways.
11319. Mr. Brown Smith. Q Then you are not referring to the corner that was across the mouth of the cut-through? A Yes, it was thrown up.
11320. Q Were not they separate altogether? There was one corner across the mouth of the cut-through? A Yes.
11321. Q And another corner up into Morris' heading? A There would be no use for carrying the car when they were connected.
11322. Q Were they one piece of corner? A They would be no use unless hooked together.
11323. Q Reran together? A No, hooked up with links.
11324. Q But they were separate pieces of corner? A Yes.
11325. Q Now, first of all with regard to that corner which went into Morris' heading—that particular part was thrown up against the wall edge of the 5th Right? A Yes.
11326. Q And the lower end, which came out of the heading into the travelling road, was driven round the corner? A Then is the way it is—[interrupted].
11327. Mr. Brown Smith. I begin to describe a state of things to get you in sound in it, or dissent from it, and then you begin to describe another state of things.
11328. Mr. Hollister. Would it not be as well if Mr. Atkinson were to sketch it on a large scale and show it to the witness?
11329. [Mr. Atkinson made a sketch as suggested.]
11330. Q Now, there was a corner across there close to the travelling road? A Yes.
11331. Q And passed on to it was another corner running right across the travelling road, and up into Morris' place? A Yes.
11332. Q There was a corner stopping across the cut-through opposite Morris' place, and that was joined on to a long corner running up into Morris' place, and this long corner ran right across the travelling road? A Yes.
11333. Q Now, what do you say because of the long corner that ran up into Morris' place? A A place at the corner line was thrown up there.
11334. Q A piece of the long corner, you say, was fixed where? A On the back heading.
11335. Q Indeed of which it had been? A Yes.
11336. Q What happened at the end of the long corner? A It was lying up against that side.
11337. Mr. Brown Smith. Q What is it that? A Indeed.
11338. Q Portion of it was driven up, and the end of the long corner was driven up against the western wall of Morris' place. What because of the corner that went across the cut-through? A Any corner that was bent—one lot was fixed in there, and the other lot was fixed up against that [pointing to the sketch].
11339. Q You say the corner was only fixed in two parts? A Yes.
11340. Q A part up against the western wall of Morris' place? A Yes.
11341. Q And the other part lying on the travelling road edge of the cut-through? A Yes.
11342. Q And you say that those two corners put together constituted the whole of the corner that you described? A Yes. There is no other corner here, but what you see and that is where I found that corner lying.
11343. Q What means here you for saying that the piece of corner which you fixed edge of the cut-through, opposite from the long place was fixed that cut-through? A Because there was no other corner about. Some of the corner was taken to keep Morris' in.

11266. Q Was not that wrapped round the post? A No. There were pieces wrapped round the post.
 11267. Q Then there were more than two pieces? A Yes.

11268. Mr. Robertson. You see a line of marks is made up of bits of pieces.

11269. Mr. Bruce Smith. Q Then there were more than two pieces? A The marks are in a split up onto the road. There are three there in the narrow lane, and then other pieces on the side.

11270. Q Then I understand you found more than two pieces? A Yes.

11271. Q Can you tell me how many? A No.

11272. Q Can you tell me where each piece came from? A No.

11273. Mr. Robertson. Mr. Bruce Smith, I think he speaks of marks in the ground.

11274. Mr. Bruce Smith. I think you will admit that I assumed all through, from my examination, that there were two pieces, one lying up against the northern wall and one in the travelling road. And I said, "Where was this one?" and "Where was that one?" And then he looks upon me suddenly that there were several other pieces of marks, and now I put up with the question as to how, if there were several.

11275. Q Then I understand you found more than two pieces? A Yes. I do not want the Commission to have a piece of evidence just before them as cut and dried which really is not cut and dried.

11276. Mr. Robertson. It did not occur that impression to me.

11277. Mr. Bruce Smith. If you will just read it you will see that he is not asked to describe things at all, and that is why I supposed my own examination. Mr. Wade led out to him, and he assumed.

11278. Mr. Wade asked "From that particular narrow across that cut-through, the marks were carried into Morris' working place?" and he said "Yes." Well, that is not his description at all.

11279. Mr. Wade. I want to describe to you, your Honor, how the marks are put up. I think it is fair just to let me explain. Of course I know there are some guidelines here who are clearly, but still their friends who do not know. They there are leading people like that (in hand). They take the marks in the road, leading people, generally. When the first piece was taken up, there would be a narrow door made out of the 5 yards, and the remainder would be taken into Morris' place, and the next piece would be carried in the same way as the first piece looked in, and would be taken down, and that would be continued on afterwards in a good length. I think there were two 3 yards lengths altogether. The marks down had three steps put on, 2 feet long each.

11280. Mr. Bruce Smith. Q All together there were a good many pieces of marks taken together, not even, but taken? A Yes.

11281. Q And after the accident they were found all together, and you could not say which was whole? A If I had known as much as I know now, I would not have touched them at all.

11282. Q You could not tell which was whole? A Yes, I know the big long piece was lying up against the wall.

11283. Q Apart from that, you cannot tell which was whole of the rest? A No.

11284. Q Could you tell me, for instance, could you swear to it, when the piece was that was across the cut-through? If I were to ask you now, could you say where the piece of marks was that was across the cut-through? A No.

11285. Now, were you not asked this question by Mr. Wade (p. 66)? I just want to show the principle that has been at work.—Now the marks, which was across the cut-through, opposite Morris' place, did you find that after the disaster? A Your answer was "Yes, it was lying up against the corner." I only want to show that when these questions are laid in that way, and a man wants to it, he says after given information to a witness which he could not say himself. I asked him just now, "Which asked to the piece of marks that was across the cut-through, could you say now where that was after the disaster?"

He said he could not, but you see, by that form of question, he did say that the board that piece of marks after the disaster lying up against the corner.

11286. Witness. Your Honor, I would like to explain just how that marks was. The marks was like that—I could not swear to any piece of marks in the mine, but I know where it was; and I know there were a lot of pieces of marks, and I know there was the only place it could come from, and it was lying there.

11287. Mr. Bruce Smith. Q And that marks had moved in the direction of the main tunnel, had it not? A Yes.

11288. Q No, it had moved into the travelling road? A Yes, in the direction of the main tunnel.

11289. Q I put it wrongly to you, and you agreed, but you did not mean that. The main to the travelling road, it had gone from west to east? A It was edge, into the travelling road.

11290. Q But it went from west to east? A Yes, it was in the cut-through which came out and went? A Yes, I have described where I found it. I found it in the cut-through on the edge side of Morris' place.

11291. Q That means that it went to the east, the opposite direction to that in which you found the marks sticking? A Yes, but it did not go exactly in the opposite direction. It blew in the corner across.

11292. Q But it went in the direction of the travelling road? A Yes.

11293. Q From the edge road into the travelling road? A Yes.

11294. Q That is the same direction as that in which these two stoppages were blown? A No.

11295. Q You found other pieces of marks further along, a few pieces? A Further along.

11296. Q Further along of those you have been describing in Morris' place? A There was one piece lying there. One red was lighter than the rest.

11297. Q Some yards on? A No.

11298. Q Where did that come from? A The thing that was found along was the marks that was lying up to the face.

11299. Q How far was it edge of Morris' place? I could not say. I will show you the place here. (Points to the plan on the plan.)

11300. Q When many yards to that? I do not know (in hand). There may be 5 yards to the wall. It is not so much on the plan. I do not want to say so much as a yard.

11301. Q It is not so much as that when you are in it. It is not so much as that in there (indicating to the plan). If you look on the plan, you will see it is in the last cut-through. It is just as such, and the plan is in a state of 3 degrees to the rock. I understand you found a piece of marks near the last cut-through in the No. 1 heading? A Yes.

11302.

11300—J. [Hansen, 2 February, 1905.]

11303. Q Now, will you tell me, Mr. Norcross, generally, quite apart from this of course, and down and up the side, how many directions did you see indications of the horse having taken up in that part of the road? A From where?

11304. Q From anywhere. How many directions did you see stuff driven in, whether it is east, or from an alley, or across, or down, or across, or anything, how many directions? A I will just start from the 4th Left and take it right up in the main tunnel, and show it thoroughly.

11305. Q I do not want it in detail. Was it in all directions? A No. At every opening, it would come, at the 4th Left—it went down the 4th Left, and at the back heading it went down the back heading. Of course, you are trying to catch me.

11306. A Yes, South? I am not trying to catch you.

11307. Q [Confusing.] On the left-hand side it was all driven to the left; and on the right-hand side it was all driven to the right.

11308. Q You know the four patches of the company in that side, north, south, east, and west? A Yes.

11309. Q Now, did you not find something driven in every direction of the company? A On the left-hand side it was all driven to the left.

11310. Q I do not want the left-hand side at the right-hand side.

11311. A Yes, Sir? That is the answer to give you.

11312. A Witness. Then, as you go up the main tunnel, the first stopping was obvious, the way (west), and then the corner of the next stopping—I do not know whether it was there out or fell out—but it fell on the road.

11313. Q And then about the next stopping after that? A It seemed to me that the horse went in the west again and then went both ways.

11314. Q Was that third stopping affected in any way or the other? A Never affected.

11315. Q Not affected at all, as far as you could see? A No. And then—the next stopping—the horse seemed to go in there, and go both ways.

11316. A Yes, South? Q Now, do you admit that you saw things which had gone in from four directions—north, south, east, and west? A Yes.

11317. Q I only want to know it generally? A I am explaining it, your Honor, to the best of my ability.

11318. A Yes, Sir? You have been very clear all along, Mr. Norcross. Just answer the questions as they are asked you.

11319. A Yes, South? Q You are too nervous not to be straight.

11320. Q Now, up here, towards the west of No. 3, which do you call this travelling road? A That is the 4th Left rope road.

11321. Q Is the 4th Left did you not see some horses in opposite directions to other horses? A It seemed to me that the horse travelled down there, and the horse then went along here [indicating on the plan, came down], and they passed together.

11322. Q Did you not see any horses going east? A None, to my knowledge.

11323. Q Now, I am just finding out anything else about that page which you discovered amongst the debris of the fire? A No.

11324. Q Have you the page here? A No. I did not find it. It was Hordless who found it.

11325. Q Does it throw any light on the fire? A None, to my mind.

11326. Q Now, just up there was some timber lying about along side of the 4th Left rope road? A Yes.

11327. Q Had that been piled up before the disaster? A Yes.

11328. Q Was it piled up in a heap? A Yes.

11329. Q And I understand that the effect of the disaster was to distribute this all over the place? A Yes.

11330. Q Can you tell the Court in what direction the heap of timber was distributed? A In my opinion, I can say give you my opinion on it, because I am not sure it was thrown in any of the 4th Left flight.

11331. Q Yes, it was scattered all over the place? A Scattered all over—gone here and there.

11332. Q Did not you find some of it after the disaster nearer to No. 1 Right than the heap had been? A Not to my knowledge.

11333. Q Do you understand the question? A Yes.

11334. Q Where was it standing before the disaster? A It was in the line of both the 4th Left and the 8th Right, but the timber was stacked especially for the 4th Left, and for these four places.

11335. Q Was it stacked in No. 1 Right? A It was stacked in the main road, No. 1 Right.

11336. [At this stage Mr. W. H. Frost attempted to take substantial notes of the evidence and proceedings.]

Cross-examined by Mr. Loughton.—

11337. Q Do you know why that place, in that top of the heading, stopped working? A Yes, Sir.

11338. Q Did you or not? A I never asked.

11339. Q And for all you know yourself there may never have been any timber up there? A There was timber up there.

11340. Q From all you know, yourself there may never have been timber up there? A I know there was timber there, I had been up there.

11341. Q You had not been up there for some weeks before the disaster, was the heading up to the end? A Yes, the heading was there when I was there, but that was seven weeks before the disaster.

11342. Q From that time up to the day of the disaster you do not know in what condition the heading was? A No.

11343. Q And the whole of the ventilation for Andrew's, Todd's, Parrott's, and Jones' places, and all the ventilation going down to Goff's Cannon head, depended on the heading being good, and in good order? [No answer.]

11344. Q Did not the ventilators go to all these working places? A Yes.

11345. Q Was not that ventilation dependent on that heading being in good order? A I am not going to answer that question until I make it clear.

11346. Q I will put it to you in a better form. Was not the air carried from Macfar's place to the top of that heading and down the main level, and through a cut-through, to Parrott's, Jones', and Andrew's places? A It went up the back heading.

11437 Q And, therefore, that it depended on the location at the back heading being kept in good order? A No, sir.

11438 Q What did it depend on? A The location had nothing to do with it.

11439 Q Did you show me where this location was shown—from the cut through to the top of the heading? A There was no location there, I am going to show you where it was.

11440 Q From the cut through opposite Murre's door, on the top of No 10 heading, right up to the top, was not the location continued? A The location was continued in No 10 [pointing to the plan]. There was no location from the top side of Murre's place to the cut through.

11441 Q Was there any location from the top of the cut through to the top of the heading? A Yes.

11442 Q Was there a stopping in the cut through? A Yes.

11443 Q Where that location was, at the top of the cut through, was it not horizontal? A It was angled a little at the corner.

11444 Q Which corner was horizontal? A The farthest from the face. A corner was more half way across the road.

11445 Q Was it the corner near No. 1. Was horizontal near the travelling road? A Near Murre's place.

11446 Q The angle corner? A Yes.

11447 Q Does not that clearly show that there had been there? A I cannot say.

11448 Q Did you account for the corner being angled, if a fence had not been there? A I am not an expert.

11449 Q Can you account for that particular piece of location being angled, if there was no fence there? A I cannot account for the location being horizontal.

11450 Q Are you at all opinion that there was a fence there to angle it? A I will not say anything about it.

11451 Q In your opinion was there a fence that bent or angled that location? A I am not certain.

11452 Q You gave opinion as a lot of other things? A That is where I made a mistake.

11453 Q Can you account for it being angled? A Of course, from as well as from would angle it.

11454 Q Was there sufficient back in your opinion to angle that particular piece of location? A There must have been either back or fence—I cannot say which it was.

11455 Q Can you tell me where the fence or the last fence was? A I cannot tell you.

11456 Q Would not the top of that heading be what you call the down of the road? A Yes.

11457 Q You know that under Rule 5 of the Special Rules you are to examine the location, fence, and surrounding appliances? A My orders were to examine as the working places.

11458 Q Do you know what Special Rule No. 5 states what the Deputy shall do. Now it says "He shall also make a true report of, wall size or as it says daily, in a book kept at the agencies of the purpose, the state of the mine roads, doors, stoppings, locations, faces, and surrounding appliances." You see that you had to make a report and enter it in a book daily. I want to know whether you did make a report and enter it in a book? A I was authorized not to make a report on any place except the working places.

11459 Q Who authorized you? A William Nelson.

11460 When did he authorize you not to make work a report? A When I first started on the job. I was told to examine all the working places and he went round and showed them to me.

11461 Q When were you authorized not to make a report on faces not being worked? A When I first started.

11462 Q Then from the date of your employment up to the date of the disaster you never examined any face that was not being worked? A Never in the morning.

11463 Q Did you ever at any time? A I never did at any time.

11464 Q About how many faces, not being worked, are there in No. 1? Eight. District which you did not examine? A None or ten.

11465 Q And could not every one of those nine or ten faces have become a mine of gas? A No, I do not think so.

11466 Q Who examined them? A I did not say that anyone examined them.

11467 Q Well you just ask where those nine or ten faces are that were not being worked and were not examined? A Yes. There are two on the top of No. 1 mine level—the 3rd and 4th west of the 17 pylons gas and there are Nos. 1, 2, 3, 4, and 5 west of the 17 pylons gas.

11468 Q Is that all? A There are two places at the bottom of the 18th Right rope road not.

11469 Q Now, do you not know that once the disaster gas has been found in the vicinity of those places? A Yes, in the vicinity of those places.

11470 Q I take it also that at the time did you not see any of those eight places? A At no time. I was none in the two headings.

11471 Q You have told us about that before? A Yes.

11472 Q Will you admit that you did not carry out the duty imposed on you by Rule 5 by examining all those faces and reporting in a book daily? A No, I will not admit it.

11473 Q Why? A Simply because I examined all the working places.

11474 How often? Mr. Thomson does not select your examination of the Rule.

11475 Mr. Brown said? Well then the witness can deal with that question as a matter of law.

11476 Mr. Edwards? Q Did any other person besides Nelson tell you not to examine the places which were not being worked? A He told me just to examine the working faces.

11477 Q He did not tell you that you had to examine no places not being worked? A It was not supposed to do it.

11478 Q Who was it? A I do not know anything about who was.

11479 Q Do you know negatively who was? A No.

11480 Q I would not take it that they ever left a positive statement? A They were, by us.

11481 Q As far as you know, did anyone else examine them? A I have nothing to do with the work daily by anyone else.

11482 Q As far as you know, did anyone else examine them? A Not to the 13 faces.

11483 Q Who examined? A They might have been examined. A They might have been.

11484 Mr. Edwards? Q What was Mr. Hay at the time you made the examination with Mr. Nelson? A The witnesses.

11485 Q Do you know why he should go and make an examination of a heading? A No, I have nothing to do with it.

[Scene—J. Keweenaw, 2 February, 1933.]

- 11676 Q Did you ever hear of the wagonmen doing anything like that before? A Yes.
- 11677 Q That is the stock wagonmen, outside? A Yes, I have heard of their doing it.
- 11678 Q Where were you when Nelson told you that he had examined the top landing? A On the outside of the mine.
- 11679 Q Why should he tell you that? A He was talking about the work; and he told me.
- 11680 Q Do you know why the furnace was let out? A They were repairing it.
- 11681 Q How long was it out? A I could not say.
- 11682 Q For how many days? A I could not say. It started from a Friday night.
- 11683 Q While the furnace was out, there would be little air passing through the mine? A I have been through the mine and estimated it when the furnace was out.
- 11684 Q While the furnace was out, there would be little air? —
- 11685 Q There was plenty of air passing through when the furnace was out? A Yes.
- 11686 Q There would be a greater probability of gas accumulating when the furnace was out? —
- 11687 Q How long was it before the disaster than the furnace was put in working order? A It would be the 19th.
- 11688 Q You said that Nelson told you on the 21st that he had examined it on the 19th? A I should say that from the Friday night until the Sunday morning it would be out.
- 11689 Q When did the fire start again? A I cannot say.
- 11690 Q Did you start take the measurement of the air? A No. It was not my business.
- 11691 Q Do you know how to take it? A I have never done it.
- 11692 Q I want to know if you know how to take it? A It is a fair question to ask me, your Honor?
- 11693 Q How? A It is a simple thing to do. A And it is a simple thing to do.
- 11694 Q My Honor? I ask you if you know how to do it? A I have seen it done.
- 11695 Q Do you know how to do it? A I will say no, because I have never done it.
- 11696 Q Now, who was it said you of the various positions in which danger and your log, and the lantern clock, were found? A I saw the lantern clock.
- 11697 Q What about danger? A I saw him signed.
- 11698 Q Do I understand that every question which you answered Mr. Wade was something you knew of your own knowledge? A Yes.
- 11699 Q Everything? A Yes.
- 11700 Q Can you tell me what became of the props that the maver had attached to opposite Moore's place? A Yes. They were broken up—4 or 5 yards past Moore's place.
- 11701 Q Where? A Below, on the travelling road.
- 11702 Q Did you notice whether the props were signed? A No.
- 11703 Q Did you notice whether the edges of the props were burned? A No.
- 11704 Q Can you say whether they were or not? A I cannot say.
- 11705 Q Do you say they were signed? A No.
- 11706 Q Was the maver bent off in the middle? A The props and the maver had been driven together.
- 11707 Q Did they not separate? A Some of them had separated. I cannot say exactly how many props were bent, I did not examine them.
- 11708 Q Would it not be probable, if the force came from No. 1 main level towards the travelling road, that it would blow the maver down off and leave the props there? A No.
- 11709 Q Then, if the force came out from No. 1 main level, it would blow them up altogether without separating the maver? A In my opinion it might.
- 11710 Q If the force came from No. 1 main level, it might have blown the props, or it might have gone the other way? A It all depends.
- 11711 Q How is the maver bent? A The maver is tilted to the top bar, and it is simply let hang down, one hanging over the other.
- 11712 Q Is there anything at the bottom to keep it down? A No.
- 11713 Q What was there to prevent the air coming? A The maver door was down.
- 11714 Q I am talking about the maver which was hanging along there to take the air to the working place? A The steps passed through it.
- 11715 Q I mean the maver which takes the air to the men's working place? A It hangs right along.
- 11716 Q What keeps it in position? A There are a few bars put down the props.
- 11717 Q How far are the props apart? A From chambers apart—3 or 4 feet, and so on.
- 11718 Q About what percentage of air leaks through, even if that system being adopted? A I cannot say.
- 11719 Q I suppose you admit that the leakage is considerable? A There is a leakage, but I will not admit that it is very considerable.
- 11720 Q As far as you are, there was no intention of force down the 5th Right rope road east. A Yes, the door was blown out.
- 11721 Q From the course of the 5th Right east, were there any intention of force? A There were three maver doors there. [Witness examined the plan.] The maver doorings on the 5th Right rope road were driven north.
- 11722 Q I think you know there was a difficulty about getting lamps to go into the mine with on the evening of the disaster? A Yes.
- 11723 Q The maver parties were delayed for a couple of hours for the want of lamps? A Of course I could not say, I was in the mine, but I heard it.
- 11724 Q I am sure that you are clearly of opinion that, if there had been an adequate supply of lamps there, there might have been more lives saved? A They would have been put out quicker.
- 11725 Q You mean that other men would probably have had the men get in quicker to carry them out? A Yes, if the men had got straight in, they might.
- 11726 Q Would you agree with the Townsmen (Nos. 11), that "an extra supply of safety lamps and of candles would be one of the number of measures suggested before ground, he kept constantly in mind and ready for use?" A Yes, but I would like to give an explanation of how the lamps are used. You might keep that maver as a head, and if anything went wrong in the maver they would be of no use. If lamps are used with oil, and had by, and you start to use them again, they will not burn. There would have to be new lamps there.

11503. Q. I am saying, "and their impediment?" A. There were lamps there, but they were no good; they should have been tested first.
11504. Q. How many safety lamps were there belonging to the company? A. I cannot say how many.
11505. Q. Did you ever detain any of them? A. I have nothing to do with them. I should say there would be twenty or thirty lamps. I think there should be a supply of lamps at the mine.
11506. Q. Do you know of the following rule, No. 7, relating to the duties of a deputy? "He shall, in the absence of a special officer appointed for the purpose, examine all safety lamps, and shall have full control of the mine, and shall see that the General Rules applying to lamps and chafing are at all times strictly observed?" A. Yes.
11507. Q. Did you examine the safety lamps? A. I did not, it was not my duty.
11508. Q. Do you know whether a special officer was appointed to do this work? A. Not to my knowledge.
11509. Q. How often during a week have you found gas in Kewbels since the disaster? A. I have never found it yet.
11510. Q. And how you will have duty examining No. 1 Right—are you still deputy? A. No, the work is being done now by William Livingston.
11511. Q. You are not responsible deputy for Kewbels now? A. Not unless I am sent for specially.
11512. Q. Were you removed immediately after the disaster? A. Yes, but not immediately after. I was asked to look after the ventilation.
11513. Q. How soon after the disaster? A. About three weeks or a month after.
11514. Q. When you asked by Mr. Rogers? A. No, I was asked by Mr. Heston.
11515. Q. Did he give any reasons? A. I was asked to restore the ventilation, such as putting up the doors and so on.
11516. Q. That is not so responsible as the office of deputy? A. Oh, I do not know that.
11517. Q. Now, I suppose that it was a common thing for stoppings in Mount Kewbels, both of rubber, to fall out? A. No.
11518. Q. They came down frequently? A. Yes, and they would be peached up with a prop.
11519. Q. There would be a considerable leakage of air then. Was your peaching up with a prop adequate to stop that leakage? A. You could stop it with a prop.
11520. Q. How often during a week? A. No time during a week.
11521. Q. Do you not admit that the stoppings were down, so that the air would escape for days and days? A. I cannot admit it, but if you point to one I can tell you.
11522. Q. Is the object of a stopping to make the place absolutely air tight? A. Yes.
11523. Q. Do you not admit that these places were very far from being air tight? A. They might be in some places.
11524. Q. And, if the ventilation of the whole of No. 1 Right depended on single doors, it might be a reason for the ventilation being bad? A. It depends where the doors were.
11525. Q. There was a single door on the 4th Left travelling road? A. No, not a single door.
11526. Q. What was it? A. A canvas door. There are two across down.
11527. Q. Are there not five doors between those and Stafford's Flat? A. There are two doors near the top to the main level of the 4th Left travelling road, and two doors at the foot to drive the air back to Kewbels and Staff's working place.
11528. Q. You recognize that there was a leakage on the 4th Left travelling road—that a door on the descent? A. Yes, there was a leakage.
11529. Q. Was there not a single door on the 3rd Left? A. No, there was no door on the 3rd Left.
11530. Q. No door there? A. It was a stopping.
11531. Q. What sort was it? A. It was built of stone and rubber.
11532. Q. Do you know whether it was in good order on the day of the disaster? A. I went through there that morning.
11533. Q. Did you suspect it? A. Yes.
11534. Q. What condition was it in? A. It was mending there, and a little air was going over it.
11535. Q. Was there not a considerable amount of air going over it? A. No.
11536. Q. It had been built in the top? A. Yes.
11537. Q. And it had sunk down 15 inches or 2 feet? A. No.
11538. Q. Was there not a considerable hole on the top of the stopping? A. There was not 15 inches or 2 feet.
11539. Q. How many inches would there be? A. I cannot say whether there was any hole at all. There was a little air going over it, but I am ready to swear that there was not a great hole there.
11540. Q. What was the use of that little stop? A. There was just a little air seeping.
11541. Q. Had not the place sunk down considerably? A. I couldn't say off-hand. It had been mended up before that.
11542. Q. How many months before the disaster? A. I was only seven weeks on the job.
11543. Q. Still you are aware that there was considerable leakage of air through that 3rd Left? A. I will not admit that there was a considerable quantity.
11544. Q. I suppose you will admit that the proper sort of stoppings are built with brick? A. Yes.
11545. Q. And that these door and rubber stoppings are practically worthless for good ventilation? A. There was good ventilation in the mine, but I admit that brick are the best.
11546. Q. Thus the system of building stoppings that way is a bad system—you say that as a practical matter? A. Yes.
11547. Q. Did you do any shot firing? A. I have fired a few shots.
11548. Q. As a deputy? A. Yes.
11549. Q. Why did you fire them as a deputy—I mean before the disaster? A. I never fired a shot before the disaster.
11550. Q. Did you know that there was danger as an accumulation of dust when a shot was being fired? A. I have heard of it.
11551. Q. Before the disaster? A. No.
11552. Q. I am speaking to you now about things which happened before the disaster. Did you know that danger could arise from the accumulation of dust, when shot-firing? A. Never in Kewbels.
11553. Q. I am not talking of Kewbels. I say that I never saw any danger in Kewbels.

Witness—J. Morrison, 2 February, 1912.

11478. Q If you saw an accumulation of dust in a mine, and shot firing was going on, would you consider that accumulation of dust to be dangerous? A I have said of it, long before the disaster.
11579. Q You know that an accumulation of dust where shooting was going on was dangerous? A I have said it.
11580. Q If that firing was going on where there was an accumulation of dust on the floor, you know that it was dangerous? A Well, I have said about it.
11581. Did you know that it was dangerous? A I never knew that it was dangerous in Kanbela.
11582. Q In any case? A I have said about it.
11583. Q Having read about it and knowing it was dangerous, did you ever give any orders about watching any particular places in Kanbela? A Never.
11584. Q Did you ever inspect the dusty conditions in Mount Kanbela? A I went around and inspected.
11585. Q Did you inspect the dusty conditions? A There were some.
11586. Q Did you inspect for them? A Do you mean for shooting? I had nothing to do with shooting.
11587. Q Now, did you inspect the mine for dusty conditions? A I say it is not a fair question. I was working on the night shift, where there was no shooting.
11588. Q Did you ever inspect for dusty conditions in Mount Kanbela? A No, I did not. I had nothing to do with shooting.
11589. Q About how often, in your experience, was the air renewed in Mount Kanbela? A I cannot say.
11590. Q Roughly speaking? A It may not have been renewed for years.
11591. Q At what time? A I say that the air was renewed a few times since I went to Kanbela, fifteen years ago, but not for years.
11592. Q You know that it is moved by the westerly wind? [No answer.]
11593. Ask Mease? Q Since the new shaft has been shaft, has any reversal taken place? A Not to my knowledge.
11594. Ask Joseph? Q At no time, for from seven to eight hours, or eight to ten hours, but the air has been renewed in your knowledge? A No.
11595. Q Have you not spoken about the renewal of the air in various ways in Kanbela? A Yes.
11596. Q Never in a working mine? A It may have been renewed, but never as far as I know.
11597. Q Do you not know probably well that it has been renewed? A I do not know probably well. It may have been, but not to my knowledge.
11598. Q Has the number of deputies been increased in Kanbela since the disaster? A Yes.
11599. Q Had you too much work to do when deputy? A We had not anything to do then.
11600. Q Had you too much work to do? A Well, I have done it.
11601. Q Did not the deputies complain in each mine of having too much work to do? A No and my mine never complained.
11602. Q Do you know that they did complain? A Yes, but I never complained.
11603. Q Did one of the deputies complain? A Yes.
11604. Q Will you not admit that you had too much work to do to do it properly? A There was only one way the deputies could complain. The night-deputy would complain about the day-deputy, or the day-deputy about the night-deputy.
11605. Q You have said that you have no idea as to what caused the disaster? A No.
11606. Q Have you got any idea? A I said at the inquest that I thought it was a big fall in the 4th Right.
11607. Q And it burst out—what? A There was a great risk of air.
11608. Q And not gas? A No gas.
11609. Q You have never changed your ideas since? A No.
11610. Q You think gas had no part in it? A No.
11611. What about coal dust? A I do not know.
11612. Q As far as you do know? A I am no expert in the matter, and you are putting expert questions to me.
11613. Q As far as you know, whether gas or coal dust played any part in the explosion? A I cannot say. I believe there was no gas in the 4th Right, and I believe that is where the explosion came from. I believe that at my heart, too.
11614. Q You remember the time that you found black damp in the 4th Right? A Yes.
11615. You did not report it? A No.
11616. Q The intake air passing the road would carry through the mine? A You are in the wrong mine.
11617. Q The air passing up No. 1 main level. If any black damp came out of the 4th Right, where would it go? A It would go down the travelling road.
11618. Are there openings on to the 4th Right on the western side of that road? A There are three openings on the western side of the road, and there are four or five on the east side and the south side.
11619. Q And on the north? A There are five or six, in the best of my knowledge.
11620. Q And so we would conclude through that road? A No.
11621. Q So that anything which came out of the openings on the north would go into the intake air? A If anything came out it would.
11622. Q And would be carried to the mine at the working face? A If anything did come out, it would.
11623. Now, do you approve of Recommendation No. 4? "That all waste workings should be absolutely sealed off?" A I do not know that it is the best idea, but they are better sealed off than left open.
11624. Q The Recommendation is that "All waste workings be absolutely sealed off and surrounded by strong masonry, for fear of explosion, such strong masonry not to come in contact with the intake?" A I do not believe in the recommendation, as a practical measure. Where there is gas, I believe in these being caulked—3 inches of there is only a little black damp. I do not believe in going up the expense, when the mine owners have to pay it all.
11625. Q Do you approve of waste workings being sealed off? A In some cases it would be better, if there were gas to have the place ventilated.

13475 Q Do you believe the waste workings being worked by steam is wrong, so that any sufficient staff will come in contact with the water? A I do not quite understand you.

13477 Q You say that there is danger from the steam, from the water? A I am sure sufficient there is a great danger, and in others there is not so much.

13480 Q Is it not better to have steam generated by steam engines? A In many mines it would be better, but in some like Mount Kembla it does not matter whether the water is in the mine or not.

13482 Q Do you not think that the air coming down the 4th Right would send the air coming from these waste through those openings? A There is nothing coming out of those openings into the mine. There was nothing coming out of the openings on the 1th Right, we have had no gas there since the ventilation has been started.

13486 Q How do you know? A I was there at the time.

13487 Q Would not the air carry the gas up, —how can you swear that there was nothing being carried from those openings to the water? A Because I was there every night when the ventilation was not running, and if there had been any gas I would have found it then.

13491 Q Now, I want to ask you with regard to Recommendation No. 1, which was before —“ Managers, under-managers, deputies, and assistants, to hold certificates of competency by examination, and to have had five years' practical mining experience before being eligible for their respective positions.” Do you believe in that recommendation? A I believe that Managers should have certificates. I do not believe that deputies or that men should undergo no examination. If the Manager is not competent to examine them, he is not efficient himself.

13492 Q Did the Manager ever examine you? A He had a very fair examination of me.

13494 Q Did he ask you a single question? A He told me that he knew all I knew.

13496 Q And I suppose you know all he knew? Did you ever hear him say he knew nothing about gas, that he did not know what carburetted hydrogen was, —now, did you consider, in view of the statement that you had made a thorough examination of the man for gas? A Yes.

13498 Q Do you consider yourself thoroughly competent to be a deputy, having written three or four rules? A Yes.

13499 Mr. Bruce Smith: I keep that question well out before him in that way —“ Having written three or four rules.”

13500 Mr. Example: Q You did violate the rules? A I did not violate them. I did everything I was told to do.

13502 Q Well, you would rely on a deputy's practical experience only? A I do not wish to go into that question.

13504 Q You do not approve of this recommendation, and I want to know what you think a deputy ought to know, if he should not be examined? A He should know gas when he comes in the lamp, he should know the way to construct a place properly, he should know the rules of the mine.

13505 Q Is that all? A That is pretty well all you can know.

13507 Q Is that all you know? A He should know how deep when he sees a light in the lamp — he should know how to fix up lanterns — and he should know the rules of the mine.

13509 Q He should know all that, and know no more? A He should know all that he can know — if he is a practical man.

13511 Q What else should he know, — I want your ideas as to what is a practical man? A That is a big question.

13513 Q What else should he know in addition to these three things?

13515 Mr. Bruce Smith: Q, is Mr. Morrison an expert on what a deputy should know?

13517 Mr. Bruce: It is useless to ask these questions, and most of them are a waste of time.

13519 Mr. Example: My object is to show that he was absolutely incompetent to be a deputy himself, in view of several rules which he violated.

13521 Mr. Bruce: Briefly anybody can give an exhaustive definition about anything. One of a number of persons who knew a great deal about things, the number who would be able to define the things which they ought to be able to perform is very small.

13523 Mr. Bruce Smith: I do not think that kind of examination really comes within the province of the Commission.

13525 Mr. Example: May I ask that witness a few questions with regard to his knowledge of gas?

13527 Q The answer? It would only be of use with a view of showing that he was in blame, and the questions must be kept within reasonable limits.

13529 Mr. Example: Q Can you tell me what proportion of the lamp becomes inflammable? A 6½ per cent.

13531 Q Of what? A 6½ per cent. in the lamp. What is meant? Yes, 6½ per cent. explodes.

13533 Q Of what? A Gas.

13535 Q Where? A Anywhere in the mine, if that is the question you are asking.

13537 Q And the answer is that 6½ per cent. will explode anywhere? A Truly in the lamp.

13539 Q Do you say that 6½ per cent. will explode anywhere, or that it will explode freely in the safety lamp? A Yes, that is what I mean, freely in the safety lamp.

13541 Q Now, will you tell me how you can tell what percentage of gas there is in the safety lamp? A Yes.

13543 Q I wish to know how you can tell what percentage of gas there is in a safety lamp? A 6½ per cent. fills it to the top of the glass. I have the table in here.

13545 Q Can you give of the table below the degrees, can you tell me what percentage of gas could be discovered in the lamp before the disaster? I If there is 6½ per cent. of gas, you know it by the lamp.

13547 Q I thought, with the lamp you only have 6½ per cent. A You do not understand me.

13549 Q Do you say that 6½ per cent. will explode freely in the safety lamp? A Yes.

13551 Q Then it will all burn? A Yes.

13553 Q You do not know how much will explode in the mine? Six and a half will explode freely with a naked light.

- 11711 Q If it went through a good, would it not be affecting a good purpose? A Yes.
- 11712 Q By helping to keep the good that is put? A Yes.
- 11713 Q As a matter of fact, we cut leakage so many, in order to ventilate the whole of the mine properly? A Yes, to ventilate the mine.
- 11714 Q If you succeeded in forcing all the air into the working lanes, what would be the result? A We were always to do it.
- 11715 Q Would you not reduce the total volume of air? A Yes.
- 11716 Q Would not the old workings and the waste air? A Yes.
- 11717 Q So that it is not good mining practice to have a more skilfully worked leakage? A No, it is a bad practice to have it without leakage.
- 11718 Q Now, on the 5th Right, you said I think the first door had stone walls? A Yes.
- 11719 Q Where were they driven? A To the east.
- 11720 Q And the door in the branching rock, edge of the 5th Right, that was driven south towards the 5th Right—this also had stone walls? A Yes.
- 11721 Q It does not take very much time to drive them, does it? A No.
- 11722 Q Did you notice, on the 5th Right, on the rope road, lots of stones and dust thrown on to the shaft? A Yes.
- 11723 Q Did you go against the reef? A Yes, and some of the stones in the 5th Right appeared to be driven in.
- 11724 Q With reference to the question at Morris place, which was placed in the mouth of the reef through, it would be no wonder to see that the other stones in the place? A Yes.
- 11725 Q Would you not always have small pieces—the pieces in the door? A I did not look at the time. If they had been left there, I could have picked them.
- 11726 Q You said that some of the pieces had been driven there with the stones attached to them—would not that help you? A I could actually see some of the doors. The men came to take away the stuff, and they took the door with them.
- 11727 Q The stones being attached to the prop, there must have come from that place? A I am certain as to where it all came from. There was no other source there.
- 11728 Q Did you observe the door in No. 1 back building after the explosion, on the back end through up to the last? A Yes, I observed that.
- 11729 Q Was it not in position, occupying what was there? A The tail end of one length was down.
- 11730 Q Was that the only part missing? A There was none missing.
- 11731 Q How was it fixed? A It was not properly fixed, it was only slung.
- 11732 Q In view of the stones being there, and being loose, occupying the short length hanging down, do you not think it was in position before the explosion? A I think it was in position, of course, these gentlemen have said—[interrupted].
- 11733 Q You say that when they say. You have no reason to think that the stones was not in position before the explosion? A I have no reason to suppose that it was not in position.
- 11734 Q Now, with regard to an examination at first stopping place. Do you know whether they were included in the inquiry or the monthly examination? A Those places would not be examined when I examined the old workings.
- 11735 Q Would you not, if a place was abandoned, and you did not examine it daily—would you not examine it when you examined the old workings? A I was told what to examine.
- 11736 Q Now, how are more than 100 places—if they were not examined in the daily examination, would it not be necessary to examine them weekly, like some of you do the old workings? A Yes.
- 11737 Q Did you examine them? A No.
- 11738 Q Did Nelson? A Whether Nelson examined them I cannot say.
- 11739 Q I think you examined the stone workings? I never examined those places.
- 11740 Q Had you any instructions? A None to examine those places.
- 11741 Q In making an examination at night, for the morning shift, what time did you start? A When I came out from the mine, I would start out at the middle of the night, and I would have a lot of lantern, and go back. I would come out at the mine and first about 2 o'clock.
- 11742 Q When did you start to make the examination? A Of course, I went back again. It would be between 2 and 3 o'clock.
- 11743 Q Were you in the habit of examining places contiguous to where the stone men were? A Yes, I examined them.
- 11744 Q Did you examine the places near by where they were? A No.
- 11745 Q From the beginning of your visit, you went right through? A Yes.
- 11746 Q No matter what places you examined for the stone men? A Yes.
- 11747 Q If you came not there for the stone men, you would also examine them again on making your inspection for the day? A Yes.
- 11748 Q And you expect have you examined the waste workings? A Yes.
- 11749 Q Where do you make record by waste workings? A That is a monthly inspection. We reported every thing we saw. We came right down.
- 11750 Q Did you, in making the examination, go into every place accessible? A Yes, so far as we.
- 11751 Q You did not have any find which you could go into? A We went every place.
- 11752 Q You went such a long light? A Yes.
- 11753 Q Did you not think it necessary to have safety lamps? A The first time that I took a safety lamp No. 1000 brought it in, and said that he always went with a naked light.
- 11754 Q Do you not think it probable that there were dirty places in which to find gas? A I would think that the most likely place to find gas would be in the highest place in the mine. I followed out what Mr. Nelson told me.

[The Examination, at 5:10 p.m., witnessed until 10:15 a.m. the following morning.]

TUESDAY, 3 JANUARY, 1963

(The Commission met at the Court House, Burlington)

Diary:—

C. E. B. MURRAY, Esq., D.C.J. (President).

D. A. W. ROBERTSON, Esq., Commissioner | D. RITCHIE, Esq., Clerk.

Mr Bruce Smith, Director at Law, instructed by Mr. Wood, Crown Solicitor's Office, appeared on behalf of the Crown.

Mr A. A. Atkinson, Chief Inspector of Civil cases, assisted Mr Bruce Smith.

Mr A. A. Lough, Solicitor, appeared on behalf of—

(a) the representatives of deceased miners, widows, &c., (victims of the explosion);

(b) the employees of the Mount Kembla Colliery (miners, whistlers, &c.); and

(c) the Miners Colliery Employees' Association (the Southern Miners' Union).

Mr F. Corbin, Solicitor, appeared on behalf of the Mount Kembla Coal and Oil Company (Proprietors of Mount Kembla Mine).

(Mr J. Girdle, Secretary to the Commission, was present to take shorthand notes of the evidence and proceedings.)

Mr JOHN ROBERTSON, previously sworn, was recalled, and further examined as under:—

Examination by Mr Robertson:—

11758 Q Do you positively state that you entered every accessible place which you were making your examination of the old workings? A Every accessible place inside of those places (indicating on the plan).

11759 Q But, in going round, if you found a hard open, an old hole, did you go in to it? A Yes.

11760 Q And, if there was any place that you did not suspect, for what reason did you not suspect it? A There were only the two exposures altogether. Of course I was not very well acquainted — (interrupted).

11761 Q If you passed any place, can you give your reasons for passing it? A I did not pass any place.

11762 Q But you must have passed lots of places that were not accessible? A I did not pass any place without going in if I could get in. Of course there are places there that you cannot get in.

11763 Q By reason of broken timber? A By reason of the roof being so.

11764 Q Then you left no place unvisited that could safely be inspected? A No.

11765 Q Now, when you were in a waste where there had been falls, where the pillars had been drawn and the roof was falling, how far did you examine that? A As far as it was safe to go.

11766 Q Did you go on top of the falls? A Well, if it was not safe I did not go. I have been on top of falls in Mount Kembla many times.

11767 Q In making your inspection? A In the inspection of the 10th that you speak of?

11768 Q I am asking about your inspection? A Oh, yes, I have been on the top of falls—where it was safe to go.

11769 Q You did not stay at the top of the falls? A If it was not safe I stopped at the top of the fall.

11770 Q Of course, there are degrees of safety, going on top of a fall at any time is dangerous, a serious offence, if he is anxious to leave the condition of a mine, will take a little risk? A Yes, I believe I have taken too many risks in going where it was dangerous.

11771 Q Well, there were heaps of falls that I would, even in Mount Kembla, that were not too bad to get on top of? A Yes, if my men were you could get on top of, and some you could not. Some you would go on against, and they would be the ones in a mine wall.

11772 Q Did you go on top of the falls only occasionally, or did you take every opportunity? A Yes, if I could get up as safely. If I considered it was not safe I did not get on top of the fall.

11773 Q Well, under any circumstances, I take it, you would hold your breath up as far as you could reach it? A Yes, always.

11774 Q Now was that black dump, which you found in the 4th Right, and did not think it worth while reporting to the Manager, much or quantity? Will you describe how much there was of it, so how it affected your light? A It covered the light, right in at the tail of the fall.

11775 Q That is where the roof had fallen? A Yes, I never went as far enough to see. The mine was all drawn, and there was a great waste everywhere.

11776 Q Were you with me and Mr Atkinson when we went in, about a week after the explosion? A Yes.

11777 Q Do you remember the black dump extinguished a lamp there? A Yes.

11778 Q Was not it as bad as that? A No, nothing like it.

11779 Q Now, would you have reported that? A Yes, if it had been the same when I saw it, I would have reported it.

11780 Q Do you remember the date Mr Atkinson and I then, and myself, entered the 4th Right after the explosion? A Yes.

11781 Q Do you remember among some props about 2 yards back from the fall? A Yes.

11782 Q To which direction was those props moved? A Well, those particular props, I could not say.

11783 Q Do not you recollect? Were you not up with us? A Yes, I was up with you, but still I cannot remember just exactly those props.

11784 Q Do not you remember they were buried in slack in the bottom end, I took it so deep? A Well, I do not recollect that. I saw men go just exactly along with you, but still I have been up there four or five times. I have been up many times.

11785 Would not you take notice of those things? A I believe I saw up the time that you speak of, and I believe there were props there that were partly buried in slack.

11786 Q The slack had been half way up? A Yes.

11787

11755. Q If you found the heads of three pigeons in towards the fall which way would you say the dove was? A I would say the dove went in.

11756. Q Did you notice that clock there, or a piggy? A There were two piggy's just inside the fall.

11757. Q No, that side of the fall, outside the fall? Do you recollect the position of that piggy? A No, I do not recollect the exact position.

11758. Q That is so important. You seem to have been taking notes — [Interposed] A Yes, I would have taken notes if I had been — [Interposed]

11759. Q You seem to have a last knowledge of the more after wards, whereas this is the last point of more interest than all others? A I know all about the timber that was further out, but I cannot recollect just exactly. I have seen it, but I cannot just recollect where they clock was.

11760. Q Do you not recollect my drawing the attention of the witnesses who were present to these pigs? A I was not along just exactly at the same time as you.

11761. Q Do you recollect a large flat stone lying on the US Right? A Yes.

11762. Q Do you recollect if that stone had been turned to the back heading, having fallen from the back heading and been driven on? A I do not know. The stone was lying there, but whether it was driven in or driven on I could not say.

11763. Q It was a black stone? A It was a flat stone.

11764. Q It was a big flat stone, but it was a black stone, from just over the wall? A Yes.

11765. Q And did you not see where that stone had come from, right in the travelling road on the back heading? A No, I did not see the road just where it came from.

11766. Q Did you notice whether, edge of that, there was any mortar in the roof from which it could have come? A Not unless it was thrown out from a fall, or thrown in from the back heading as you say.

11767. Q It was about 20 odd yards from the fall? A Yes.

11768. Q Do you not think it more probable that it would come from the back heading, assuming that there was a hole in the roof? A Yes, of course there were any amount of stones falling there, but how that particular stone got there I could not say.

11769. Q There were not any amount of stones falling? A There were any amount of stones falling at the back heading.

11770. Q Oh, yes. How many years' practical experience have you had in cases? A About thirty-five years.

11771. Q And have you a knowledge of the different systems of working coal? A Long wall, and bord and pillar.

11772. Q Do you know all about extracting pillars? A Yes, I understood all about extracting pillars.

11773. Q And timbering? A Yes.

11774. Q And say I have it that you have a thorough practical knowledge of mining? A Yes.

11775. Q And what is your experience with gas? A Well, of course, I have had experience in the old country. I have some mine near it in the country.

11776. Q That is what I want? A I have held the same position in the old country as I hold in Mount Kemble.

11777. Q Where? A In Jordan Hill.

11778. Q That is a large mountain mine? A Yes, sometimes and not.

11779. Q There was plenty of gas there? A Yes, there was gas there.

Examined by Mr. Fisher —

11810. Q I want to get one matter cleared that is not clear at present in my mind. Were you the examining deputy for the No. 1 section? A Yes.

11811. Q The examining deputy for the witness during the day, and the waste examining deputy for that section? A Yes.

11812. Q Now, in connection with the waste, were you the only examining deputy in connection with the waste workings? A I cannot say. Of course I examined waste, but I cannot say whether any other deputy examined them.

11813. Q Do you know of any other whose duty it was to examine the wastes? A I do not know.

11814. Q You never heard of any other? A I never made any enquiry.

11815. Q I suppose you report to a boss? A Yes.

11816. Q Did you ever see the names of any other person who had reported the examination of waste workings? A In No. 11.

11817. Q Yes? A No.

11818. Q And you never heard of any other? A No.

11819. Q Now, what do you call those workings? A Workings where the pillars have been taken out and the roof has fallen.

11820. Q And what do you call a profit? A Gas and waste workings are the same. A real gas, as far as I take it, is in the long wall workings. The gas is between two buildings is a long wall gas.

11821. Q Where the coal has been all worked out? A Yes.

11822. Q And, in the pillar and stall system, where the coal has been all worked out, what do you call that? A A waste.

11823. Q You would call it a waste in the case of pillar and stall? A Yes.

11824. Q And a gas in the case of the long wall system? A Yes.

11825. Q The modern would be exactly the same? A Yes.

11826. Q And what do you call places where people have been worked, and the pillars are all standing unworked? A I would say the beds were driven up — [Interposed]

11827. Q And what would you call a waste of the workings where the beds had been completed and the pillars had not been consumed? A We would generally say, "The old beds," and we begin to take out the pillars.

11828. Q Now, in the case of pillars standing like that, and headings which have been driven up sufficiently far for the time being and are not working, when part of your examining duties would they come under the day examination or the waste examination? Q I do not know what part these places would come under.

Exhibit J Memo, 1 February 1963

- 11819 Q I will put it to you this way--when did you examine these places, in your daily examination or in your waste examination? A You mean the opening inspection?
- 11820 Q Yes, the daily examination? A Well, I did not examine these places at all.
- 11821 Q You did not do them at all? A No.
- 11822 Q Is neither your examination nor the other? A Neither one nor the other.
- 11823 Q So that whatever parts of the workings was standing, pillar workings, or headings, or anything which may be standing drawn up sufficiently far for the time being, there were never examined after? A Of course you mean they were drawn up the distance, and set off by the line of cutthroughs looking.
- 11824 Q I understood them way never examined by you? Q Yes by me.
- 11825 Q What was the object of examining what you call the waste workings, where the road had no all cutthrough, and refusing to examine these places which were likely to be working? A In my examination I made it was according to what I was told. I was told the way to examine the places, as stated before. Of course, it is no use any going into the subject to say what should have been done or what should not. I had only to do what I was told.
- 11826 Q I will put it to you this way: were there any other sections of the workings in No. 1 mine were likely to be worked and not in actual operation, other than those which you have mentioned? I think there were eight or ten you mentioned yesterday, that is, I think you mentioned an opening apart from these two headings. Were there any other parts in your system standing which were not examined, which were likely to be worked? A Well, of course, I never knew they were likely to be worked. I would only be told that they were going to start the day before they were to be started. I would be told the day before to examine in the morning.
- 11827 Q Were there any other parts of this mine with pillars standing intact? A In the 4th level there was a place.
- 11828 Q How many places were there there? A Altogether 1.
- 11829 Q Yes, where the birds had been worked out, and the pillars left standing? A Three places were all drawn up the distance (meaning in the birds' mind from right to nearly).
- 11830 Q How many would there be apart from those you mentioned yesterday? A That is the only place that I can think of.
- 11831 Q There are the ones that you described yesterday? A Yes. These two headings you described yesterday (the No. 1 West heading and No. 1 West heading), and these places along here? A Yes.
- 11832 Q You mentioned distance called a rock here (and left open end)? A Yes.
- 11833 Q What about these places here between the 4th left and the 12th were good? A That is up into the roof.
- 11834 Q And these are all pillars here? A Yes, that is finished.
- 11835 Q Are they built up at the opening here? A Most of them are. They were before.
- 11836 Q Are there more of these open? A They are open now, but I do not think there was one of them open before.
- 11837 (The words referred to are those on the northern side of the 15th were good, between the good and the 4th left open end).
- 11838 Q What about these places here, between the 15th were good and the 3 were good--were these all closed up thoroughly? A Yes.
- 11839 Q Right along the 2nd Right, to the very end and there, were they closed up? A I think there was one place down that was open at that 2nd left.
- 11840 Q Whereabouts was that? A I think it was about the middle.
- 11841 Q That is in the middle of the north side of the 2 were good? [It is correct.]
- 11842 Q Was that place examined daily or in your waste examination? A That was examined in the morning, since the 15th.
- 11843 Q Every morning since the 15th? A Every morning since the 15th. I think there was just one place that I can remember. Of course it is all kind of open now.
- 11844 Q What about those made looking up here (the birds on the north side of the 4th left)? Are these open? A Yes.
- 11845 Q Did you examine these also during your daily examination? A No.
- 11846 Q These were not examined at all? A I cannot say.
- 11847 Q No by you? A No.
- 11848 Q Putting it clearly, I take it that that is the position as far as you are concerned: that you were the morning deputy, look for the daily examination, and for the waste examination of No. 1 mine, and that you never did examine places which were standing or were abandoned for the time being? A No, I never examined them.
- 11849 Q Now, just here and here, in answer to Mr. Robertson, I think it was, that you went into the waste workings as far as you could go? A Yes, as far as it was safe to go.
- 11850 Q Now, how do you reconcile that with this in your former evidence here on page 13 of the evidence taken at the inquest? You said "I never did anything to see whether gas had accumulated in that waste" You were talking then, I think, of the 15 were good, and further on you say "I never went into the waste as my job is. I will I was speaking about to me particular waste. These waste workings that I spoke about in that evidence the waste examination in No. 1 mine, that is when I was examining in the morning. Say I was going down examining for the morning shift, if it was a waste examination, I would be told in the morning to go and examine certain parts, say the 2nd Right.
- 11851 Q Do I understand that, when a waste examination had to be made, you were told in the morning what part of the waste you had to examine? A Yes, I was told that this would be the monthly examination of the waste. Of course I only examined twice.
- 11852 Q Were you told the particular part of the waste that you had to examine? A Yes--my job was to examine the 1st Right.
- 11853 Q You need not describe the parts, but do I understand that, after you had received instructions to examine certain parts of the waste, you did not examine any other parts? A I examined the parts I was instructed to examine.
- 11854 Q Would there be any parts of the waste left after you had examined in that way? A These workings going in the main road were not examined at the time I made the monthly examination.

11585 Q The waste workings going in the main shaft? A Off the main roads. There were not examined, only on the 3rd Right and the 3rd Left.

11586 Q On the columns where you went to make your waste examination, these waste workings you have now described were not examined? A No.

11587 Q When were they examined? A They were examined every night. I went into these places every night.

11588 Q They were examined every night? A Yes, since were the instructions I got.

11589 Q Now, taking it that you examined most of the waste workings every night, and whether just when you were told to examine, when you were making your monthly examinations, were there any other parts left that you did not examine? A None, to my knowledge. Of course, I was only going with another man, making the waste workings at the time.

11590 Q You were not familiar with these yourself? A No, I was not intimate with them myself.

11591 Q And you were only going over the ground? A Of course, I know a bit of Mount Kemble, but I was only leaving these places. Another man went along with me.

11592 Q I think on page 14 of your evidence at the General's inquest you described the places you went to. The places were specified on the 18th. That is the last waste column you made? A Yes.

11593 Q The places you specified on the 18th were the last headings where the back air came straight in from the travelling road, was that right? A The daylight heading.

11594 Q We supposed just an opinion on that date. You know that air comes in not waste workings? A Well, I made it very clear that we went into all the openings of these headings, but there are usually any that you can get my length into—just a few yards. They have been right in the years.

11595 Q I think you told us that, in your opinion, the disaster was caused by a fall coming out a list of air? A Yes.

11596 Q You said that you believed that there was no gas mixed with that air? A Yes.

11597 Q How do you come to come to that conclusion? A Well, by the direction of the breeze, that is all.

11598 Q Does the direction of the breeze tell you whether there has been any gas mixed with the air or not? A Well, I had not personally found it.

11599 Q Do you not know that you have previously told us that you never looked for it? A No, I have not told you that I never looked for it.

11600 Q That you told us you simply went with your flare light? A But I did not go to the 18th Right with my flare light.

11601 Q Is that where you say the blast came from? A Yes.

11602 Q And is that the only reason you have got for arriving at the conclusion that there was no gas, because you yourself have never found it? A Never found any, that is the only reason.

11603 Q Well, now you tell us what caused the after-damp arising out of that disaster? A I cannot go into those questions.

11604 Q You have already told us that you have read scientific works, and you have had theory in a post-examiner, and have had considerable experience in gas mines. In thinking about whether there was gas in that blast or not, did that question never come to you, as to what caused the after-damp? Did you take that into consideration, when you were trying to fix in your mind whether there was gas or not? A Yes, I took it into consideration, but still I am not an expert witness.

11605 Q Do you think you are competent, now, to say that there was no gas with the blast of air? A I am so found any gas.

11606 Q Do you think you are competent now to say there was no gas mixed with the blast of air which, we say, came out of the 23rd level? A I do not think there was any gas. That is all I can say.

11607 Q It is a matter of opinion, and you are not competent to say what caused the after-damp? A No.

11608 Q Is that all? A That is all.

11609 Q Now, as a practical man, if I ask you put these questions to you. Do you think that an inspection which registered in so many places as is likely to be sufficient? A The places I reported were all free from gas. 11610 Q I am not asking you that. I am asking you to state, as a practical man if there thirty years' working, and with a knowledge of some scientific work, if you think the inspection was of any use whatever, when you knew what other parts were not inspected? A But there was nothing else to go, and I was not supposed to go there.

11611 Q I did not say whether you were supposed to go there. I asked whether, in your opinion, as a practical man, it was of any practical use to have made an examination when so many places were left unexamined? A I am not of the opinion that it would be better to examine them all.

11612 Q Do you think an examination without examining the whole is complete? A Well, it was more complete if they are all examined.

11613 Q Is it of any practical use if some of them are not examined? Would it be any use to certify that twenty men's places were free from gas and was being struck full of gas? Would a certificate of that kind be of any use for the safety of the mine? A Well, of course, I do not know anything about one being full of gas.

Further examination by Mr. Robertson. —

11614 Q In the event of a number of places not being examined, your only safety lies in the probability of an accident occurring there? A Yes.

11615 Q I would like you to explain a little more clearly what you mean when you give the evidence at the inquest. Do not leave it whether you could remember exactly these waste workings where I never got, I never did anything to me of other gas had been confined in that state, I never went into the waste in my life? A No, I might wanted me to go into the middle of the 33rd level. That is the place we were speaking of.

11616 Q You agree to say, of course, that it was impossible to go in there? A Yes.

11617 Q Mr. Robertson? Q You did not mean to say that Mr. Lynght wanted you to go in there, but he said you had to go in there? A He wrote me to go, and he would not go himself.

11618 Q Mr. Robertson? Q I want you to say now whether you examined the waste air for as it was practicable for a deputy to go? A Yes.

11619 Q Did you examine along the ridge? A Yes.

11620 Q Did you go on the top of the shaft? A No it was safe.

Witness—J. Henson, 3 February, 1913.

11397. Q Then, this entire misleading statement here wastes qualification to that extent? A Yes.
11398. Q Because it looks as if you never had made an inspection, and had never tried to find out whether there was gas there or not? A Well, that was the place where I was to find it, in the center of the furnace.
11399. Q You cannot, of course, go into a waste where the roof has fallen in, and there is no place for a man to go, but, where the roof had fallen down, and it was possible for a man to climb on the top of the pile, did you go? A Yes.
11400. Q Did you go where it was practicable? A Yes, as far as it was safe to go.
11401. Q In your evidence, you speak about a fall of 3 feet thick on the 4th Night? A Yes.
11402. Q Now, do you mean that 3 feet of the roof had fallen, or was the fall 3 feet thick? A Yes, and a half foot of the roof had fallen.
11403. Q If there were 3 feet of the roof fallen, that would leave very largely? A Yes.
11404. Q It would be pretty nearly up to the roof? A No. Well, of course, at Mount Kemble there is no slack, and it falls flat on the floor.
11405. Q It depends on how it falls, because you know that a roof, after it has fallen, occupies a good deal larger space than in the solid? A Oh, yes, it takes a larger space, but still there was plenty of space. It was not nearly up to the roof.
11406. Q How much might it be from the top of the fall to the roof? A About 4 feet.
11407. Q I think you and there were about 1 chaise square? A That was what was full.
11408. Q Well, that is nothing very extraordinary? A No, that is nothing extraordinary.
11409. Q Then a fall 3 chaise square would not be a very remarkable event? A It would depend.
11410. Q But here, you not repeatedly men 3½ over an area of 3 chaise square? A I cannot remember seeing falls 3 chaise square generally.
11411. Q Do you not recollect saying to me that that was a common occurrence? A There are always falls, but it perhaps levels up most circumstances than that.
11412. Q But with 3½ feet fallen, and only about 4 feet to the roof, do you think that the whole 3 chaise square, if it had fallen at the same time, would create a very great accumulation? A Yes, I think it would.
11413. Mr. Bruce Smith: Q Does he mean that it was 3½ feet thick after it had fallen?
11414. Mr. Robinson: I have just asked him.
11415. Mr. Bruce: I think he means it was 3½ feet thick on the floor.
11416. Witness: That is what I mean.
11417. Mr. Robinson: I asked you that.
11418. Witness: You asked me what height it would be, and I said about 4 feet from the top of the fall up.
11419. Mr. Robinson: Q Then, do you wish to withdraw your statement to me when you were in the mine with the Chamaeleons—in answer to my question you said that a fall of that extent was nothing uncommon? A A fall 3 chaise square was nothing uncommon.
11420. Q Yes? A I never said that, to my knowledge. I might have said it, but I could not have been saying any attention to what you were saying.
11421. Q It seems to me nothing at all extraordinary. However, if you wish, you may qualify it now.
11422. Q A 3 chaise square is a larger fall at Kemble.
11423. Q At Kemble? A Yes. When the slack was left on Kemble you certainly knew that there was a fall.
11424. Mr. Bruce: Q Because the slack took it up also? A Yes, it gradually came down and rested on the slack, but it makes a difference when it comes on the bed.
11425. Mr. Robinson: Q What damage do you think a fall 3 chaise square would do, with only 4 feet of space to fill up? A I could not say. Of course I have read about things being done by a fall.
11426. Q Have you ever worked in the Hamilton District? A Yes, but not very long. I was very young when I was working there.
11427. Q Did you ever work in the 33 shaft? A In the little coal.
11428. Mr. Bruce: Q What was the height of the mine below it had fallen? A The mine was nearly 6 feet high then. Of course in my evidence I did not say 3 feet thick.
11429. Q I am asking you now what was the average thickness of the mine there at the 4th Night? A About 6 feet.
11430. Mr. Bruce Smith: Q That is before the fall? A Yes.
11431. Mr. Robinson: Q When you suspected the old workings did you mark the place you suspected? A Yes.
11432. Q With the date? A Yes.
11433. Q Are the marks there now? A, I cannot say. You cannot find any marks in any place now—there are any amount of marks in the old workings, but of course you cannot depend on any mark to the main roof, because of the dirt.

Further examination by Mr. Ritchie—

11437. Q You have told us, I think, that there was very little black damp on the first occasion you went through after the explosion? A Yes, very little.
11438. Q Not worth reporting? A There was very little.
11439. Q You have said that your light did not go out? A No.
11440. Q Do you think that there was no chance to put your light out if you went further in? A I could not say. It was dimmed, at the distance I went. I went the distance I wanted to go.
11441. Q That is to the top of the fall? A Yes, I went it to see if it had fallen that night.
11442. Q And you told Mr. Robinson that you descended as far as possible—on on wood on top of the fall, if it was safe to go.
11443. Q Now, you have told us that your light was not put out by the black damp? A Yes.
11444. Q And that it was an insignificant quantity that you did not think it worth reporting. Now, did you not think it was quite safe to go on the top of the fall and examine? A No.
11445. Q Why? A The timber was all out.
11446. Q We know that, because the roof was down? A Yes, but there was plenty of it higher up. If there was 3 ft. or 2 ft. 6 in. down, there was plenty up above.

- 12947 Q What was the state of the roof? A It was very rough. It was all working while I was there.
- 12948 Q From what you could see, had that 2d floor fallen all across that area? A I do not think it had in some places it was not down. Where I was it was down, and further along it was broken and not fallen.
- 12949 Q Of course you can walk along poles and not see it, but you can see it when you look back.
- 12950 Q But had that fall, 2d floor thick, extended across the whole of that 2d floor? A There were some parts of it not down.
- 12951 Q What was the extent of the area not down? A I could not say.
- 12952 Q Was it nearly all down? A There were some places on the right-hand side going in where there was some up, but I could not say exactly the amount.
- 12953 Q Was there a small part or a large part of that which was not down? A A small part.
- 12954 Q Now, which, in your opinion, would be likely to cause the greatest commotion—the first fall which took place in that shape, when it had all the dust in it, or the second fall, when there would probably be no dust at all? A If there had been a big fall at the first, that 2d floor would do very little damage.
- 12955 Q What? A I say the 2d floor, if it had been a very large fall, would have done all the dust out. Of course I was not there when it fell.
- 12956 Mr. Brown Smith? Q You said 2 ft. 6 in. A 2 ft. or 2 ft. 6 in.
- 12957 Mr. Shuman? Q What do you say? A The first fall, if it was big enough, would make more commotion than the second fall.
- 12958 Q Do you now think that the first fall would be likely to be more dangerous than the second fall? A It is a very big enough. Well, now, it has fallen, now as high as the ball, so far as I know.
- 12959 Q Did you see any results after the first fall at all, or did you not know that it had fallen until you went to look? A I did not know until I went to look.
- 12960 Q Is that the fall of 2 feet 6 inches left no dust at all, although it had all the dust which had accumulated to walk on? A Not to my knowledge.
- 12961 Q Then, how do you account for the second fall, which had less dust to walk on, making all this commotion? A
- 12962 Mr. Brown Smith? Only 15 inches more.
- 12963 Where I will tell you. One morning I was working here, lying a wire at the 4th Right, and there was a great deal of hot steam and put my light out—out of my room and so—and I came out, and made repairs of William Nelson, who was the deputy then, what was the cause of it. So to tell me the next morning that it was a fall on the top of the 4th Right.
- 12964 Q Was that a large fall? A I could not say. I never made any inquiries.
- 12965 Q How long was that before the disaster? A That was years before, just when they started this road.
- 12966 Q One you explain now, after having had a wide time to think about the matter, what caused you to arrive at the conclusion that the second fall had done any damage? A Well, on the paper I read—it was through seeing an account in the papers, and from the direction of the force in Mount Kravitz—that I came to that conclusion.
- 12967 Q It was through reading something in the papers about Mount Kravitz mine? A No, through reading something in the papers about a fall in Broken Hill. I cannot tell you the exact date. I think there were some men in it—I could not say the number of men.
- 12968 Q I think we have all got a knowledge of that. Just tell us what conclusions you arrived at out of that? A Well, with the facts that was there, I was of the opinion that it was caused there by the fall. Of course I am not an expert, and it is hard to know that question for the experts.
- 12969 Q Well, you see, you have already given your opinion that this disaster was caused by a fall in the 2d mine just having opened a blast? A Yes.
- 12970 Q And you have read that, in your opinion, there was no gas in that blast? A Yes.
- 12971 Q What, in your opinion, would cause the trouble? You know that trouble has been caused a great many times here before, and the mine tunnel. Would that come by a puff of wind? A Of course I cannot describe it to you.
- 12972 Q Do you think it would be done by a puff of wind? A No the wind was strong enough it would do a lot of harm.
- 12973 Q Do you think the first fall would be likely to cause more dust than the second fall? A I cannot say. No I do not think so. I have told you before that it would not cause as much dust as the second fall. It is all on top of the dust, which it covered.
- 12974 Mr. Shuman? I think that is quite the contrary to what you did say.
- 12975 Mr. Shuman? Yes.
- 12976 Q I will ask you, further, was that section of the roadway at the entrance to this 3d mine good deep or dry? A There was a little water running at the side, but it was, generally, dry.
- 12977 Q Was it deep? A Yes, there was then lying there.
- 12978 Q Is it so a fact that it was naturally deep and cold, a, the whole of that roadway? A No.
- 12979 Q The road was lying into the 3d mine just on the 4th Right? A In the 4th Right, it was deep, but there was a gutter out there on the bottom. A lot of dust came out of the 4th Right always. It was a dirty place when it was worked.
- 12980 Q Now, was you remember the state of the hanging roof immediately at the mouth of the 4th Right? A It was deep.
- 12981 Q Was it deep for some considerable distance on sections of the road leading to the 4th Right? A Yes.
- 12982 Q There was very little dust the first time it was likely to have come from that caused the trouble? A In my opinion most of it came out of the stop air.
- 12983 Q What happened? A The stop air leaves the two headings.
- 12984 Q Were there any of them disengaged there? A They were all disengaged. There were some of them that I took at that you would not have had ever been a stopping there at all.
- 12985 Q Was the dust that was between them cut through all that? Was it all dust that the stoppings were packed up with? A All the roof. I cannot say what it really was, because I never put the stoppings on, but they put on their stoppings with the roof, the least and if they could get it.

1295. A: They left the stoppage as well as the first one they could get? A: The first stoppage got.
1296. Q: Do you regard that, as a practical one, as a satisfactory way of finding these stoppages? A: Well, as far as the way it was done at Mount Kemble.
1297. Q: Are you prepared to give an opinion as to that? A: It would well enough at Mount Kemble.
1298. Q: As a practical one, are you prepared to give an opinion, or not, as to whether you think it safe to do it? A: Yes, it was quite safe at Mount Kemble. There is plenty of ventilation at Mount Kemble.
1299. Q: I want to know how you arrived at that conclusion, in view of what you told us just a moment ago? A: What was that?
1300. Q: You told us that the dust, in your opinion, came from these stoppages, and now you say it was perfectly safe to get them there? A: When I talk about these stoppages, I mean it acted as a carrying place.
1301. Q: I have been putting the matter to you in quite a different way altogether. Do you think it is a safe way of doing it? We have got to regard safety in mining operations? A: Of course I understand your question now. As we note that we knew did they start to put anything in with the stoppages, having any danger?
1302. Q: You mean that they never expect, or take precautions to prevent, disaster? A: I mean, when they start to put in stoppages at any time, they do not put stoppages in with the intention of anything happening.
1303. A: *Mr. Dixon*? They do not put them in with the intention—you mean anticipation—of their being blown out? A: No.
1304. A: *Mr. Johnson*? He means that they do not expect that there will be an explosion at all.
1305. Q: *Mr. Johnson*? You do I understand, you to mean, when you say that, nobody expects to do what they start? Do you mean when they commence a mine? A: Of course you are anticipating their being blown out.
1306. Q: I want an expression of opinion from you, as a practical man, whether you thought best to leave stoppages up with this very fine dust, the very finest dust they could get, was a fairly safe proposition? I think a fairly safe proposition for mining the coal here.
1307. Q: That is really an answer to the question in the way I put it to you. If on your way of looking at it, now, do you think it would be quite safe to build these stoppages of gas? A: No.
1308. Q: Well, it is not known to be dangerous, would you not think it would? A: I would not think it would be safe with gas.
1309. Q: Well, if dust was known to be dangerous—only, perhaps, in a lesser degree than gas—would you regard it as safe? A: I am not sure anything about the dust being dangerous.
1310. Q: I do not see you do. It was known to almost everyone, except yourself.
1311. A: *Mr. Johnson*? With your present knowledge, do you think so? A: Well, of course, as far as I am concerned, I did not think these stoppages had anything—the dust was blown out into the road, then the dust—then that—anything more about it I am not prepared to say. I think that in a question like this.
1312. A: *Mr. Dixon*? Q: Then, how do you come to be able to give such a definite opinion as to what causes it? A: When I gave my opinion, I told you I could not say anything more.
1313. Q: And I am trying to ask you more? A: The more I give the more I am asked.
1314. A: *Mr. Johnson*? Q: About these stoppages? A: About these stoppages? A: About these stoppages, which would be the better—can be put with rough stone, or can be put with fine stone? A: Fine stone.
1315. Q: Is not that the most sensible? A: Yes.
1316. Q: And I see that the reason why it is not for this purpose? A: Yes.
1317. Q: Now, are you quite sure about this 100 light being dry and dusty? A: It was dry, and there was a gusty wind the day.
1318. Q: I am asking now to the road from the back leading to the hill? A: There was dust there.
1319. Q: Well, the way was in my mind was that it was dusty stoppage? A: Yes, when it was filled up the water was in the middle of the road when you were travelling there.

Further examination by Mr. Bruce Smith —

1320. Q: You told Mr. Johnson that your only reason for saying that gas was not an element in this explosion was that you had never found it? A: Yes.
1321. Q: If you had found it? A: I would have said I found it.
1322. Q: Would you then have thought that gas had anything to do with it? A: I do not know. I would have wanted to have seen gas in the 100 light, but I never found anything.
1323. Q: If you had found gas, would you then believe that gas had something to do with the explosion? A: I could not say. It would depend on the position of the place where I found it.
1324. Q: Did you wish say that your only reason for saying that it was an explosion in which gas was not involved was that you had never found it? A: Yes.
1325. Q: Then I ask you if you had found gas, would you have thought gas had anything to do with it? A: If I had found gas, it would alter my opinion.
1326. Q: If other people had found gas, in your knowledge, would you then think that gas had anything to do with it? A: Yes, it had been found in my knowledge.
1327. Q: Do you know that Mr. Johnson found hundreds of feet of gas up in the back leading? A: Yes, I believe that.
1328. Q: You believe that? Now, do you think gas had anything to do with the explosion? A: Of course that is a different place. I do not believe there was any gas in there.
1329. Q: You believe that Mr. Johnson found hundreds of feet of gas up there four days after the explosion, do you still think that gas had nothing to do with the explosion? A: Yes. My reason is that, at the time that Mr. Johnson found the gas, the ventilation was not clean off.
1330. Q: But that since that time was gas going away in this mine? A: Oh yes.
1331. Q: Then, does not that show your conclusion as to the probability of gas being an element in that explosion? A: No, it does not. If Mr. Johnson had found it many feet or yards of gas in the 100 light, then it would alter it.

- 13003 Q You misremembers about the Friday 25th fall. When did you read about that? A I remember
 13004 Q But you are assuming to find the explosion? A Yes
 13005 Q Of your own mind? A My attention was drawn to it by Mr. McKeown
 13006 Q Before the explosion? A Yes
 13007 Q Do you have less sleep that fall was? A I do not know
 13008 Q Do you know that it was 40 feet deep? A I could not say. I forget much about it
 13009 Q What did you read about it? A I remember the thing happened, but of course it has not nearly
 13010 Q You do not know that fact about it, at all events? A ——— [Witness did not answer]

Further cross-examination by Mr. Loughlin —

- 13011 Q You told Mr. Hester that you were not the worker on for as much as 100 feet? A Yes
 13012 Q Did not you say at the request? A My object is not at any time take me beyond any fence of a
 13013 Q What was said on the request was? ——— [Interposed]
 13014 Q Did you say that? A I do not know whether I said it or not. I do not know one word I read at
 13015 Q Did not you say that at the request? A I never around the fence in the waste workings to look for
 13016 Q At any time? A I cannot say, because I was worried to think at the request. That is true. You
 13017 Q You did not.
 13018 Q Did you, as a matter of fact, cross any fence any waste in respect to a deputy? A Yes
 13019 Q Now, tell me what fence it was you crossed? A At there was a fence ——— [Interposed]
 13020 Q No "O" Mr. Morrison, you said at the request that you were around any fence to look for gas.
 13021 Now, I want to know, if you say you did cross a fence, what fence was it, and where did you cross it
 13022 a deputy? A The fence on all these ——— [Interposed]
 13023 Q That is not an answer. Where did you cross a fence? Were you what particular fence you
 13024 crossed, and in what particular waste? Now you do it carefully. A Well, I crossed a fence—you just
 13025 want to know our fence?
 13026 Q But you only cross one fence? A No, I did not say that.
 13027 A Yes, Mr. Loughlin, he is just going to tell us some more fence.
 13028 Q Where? There, on the landing off the 1st flight. I went to through those (underbag), and I
 13029 around a fence there. I am getting a bit tired, and I cannot think clearly
 13030 Q But Mr. Loughlin? Q You have told us of that one fence that you crossed? A Yes
 13031 Q About how long was that before the disaster? A On the 11th. Of course I have not got my
 13032 back the date as you have
 13033 Q Now, are you remember any other fence you crossed as deputy? A That is the way it is at
 13034 Kewille, say there was a fall ——— [Interposed]
 13035 Q I do not want that. A I read it then
 13036 Q Now, you say you remember that fence of Mr. Loughlin
 13037 Q But you remember that you crossed any other fence than the one you mentioned
 13038 on the 11th? A I cannot remember whether I crossed exactly just one fence on that morning
 13039 Q You cannot remember whether you crossed any other fence than the one that you told us of?
 13040 A I cannot remember
 13041 Q Now, I want to know that on pages 15 and 16 of the evidence taken at the
 13042 Commins request he speaks two or three times over of going inside the fence of the waste, and going up on
 13043 the waste
 13044 Q And on page 17 he says he never crossed one fence
 13045 Q What you said that it was not true that you did not cross the fence into the
 13046 waste workings? A Yes. If you had been at the request, and heard the way it was carried on—they
 13047 were saying things, and putting them down, that I did not say at all
 13048 Q Now, there are a number of fences at Kewille? A Yes
 13049 Q When you were working your roundabout, do you cross those fences and go as far as you can?
 13050 A Yes, I cross the fence and go as far as I can. That is, if there are fences. There are only a few at
 13051 times with fences
 13052 Q Or, again, the two statements are in very different? A Yes. Well, perhaps I said it
 13053 Q Mr. Hester? A Tell you have the deposition read over before at the request? A Yes, I believe I had
 13054 Q Did you say those deposition of? Q Yes, I believe I signed them
 13055 Q Mr. Hester says it is only fair to say that it was within a few days of the death of his two sons,
 13056 and he did appear to be in a very confused state when he was examined
 13057 [Witness left]

13057 Mr. Curran: Will your Honor kindly allow Mr. Hester to take up please?

13058 Mr. Hester: Certainly

13059 [Mr. J. J. Barry then appeared on behalf of the Mount Kewille Coal Company.]

Mr. JOHN HERRISON was sworn, and examined, as under —

Examination in chief by Mr. Loughlin —

- 13060 Q What is your name? A John Hester
 13061 Q What are you? A A miner
 13062 Q Where are you at present employed? A Gairloch Dam
 13063 Q Were you employed at the Mount Kewille Colliery? A I was
 13064 Q For how long? A For two years
 13065 Q During what period? A I left there about, I think it was, between six months to the year
 13066 Q And what were you doing there? A I was taking the stone up, and shooting the bottom of the
 13067 road
 13068 Q That is, you were making the road level for laying the stone, to take the stone into the working
 13069 places? A Yes
 13070 Q Was that at Gairloch or at Kewille? A At Kewille
 13071 Q Were you working as a stone setter at the Mount Kewille? A I was 13072

Worcester, Mass., 2 February, 1883.

12070. Q And how long were you working there? A For two years, or somewhere in sight two years, as I could possibly remember.
12071. Q Now, during that time, who was the night deputy? A Mr. Frank Drangy.
12072. Q And was it his duty to inspect places where you had to lay the mine? A Yes.
12073. Q And did you take your orders from him? A No, I did not take orders from him.
12074. Q Who pointed out the places where you had to make the most work? A I did, myself, to be sure. I told him every number I had to go to. Every place in connection, and it is put on the book with each man, every number that was placed on the book, I told him when I went down that I had to go to those places.
12075. Q You saw certain places marked on a board as requiring attention from you, and you told Drangy those places, and his duty would be to attend them before you went down? A Yes.
12076. Q Now, has it happened that you have been to such a place before Drangy had been there to examine it? A Many a time.
12077. Q And can you tell me of any occasion that you yourself discovered any gas in any of those places? A Yes, I have.
12078. Q Now, can you tell me where? A In the 4th Left, a very small quantity.
12079. Q When you say the 4th Left, do you mean the backside road or the travelling road? A I mean in the working place in the 4th Left.
12080. Q Can you tell me who was working in the place at the time you discovered the gas? A I think John Drake. I would not swear. I think it was John Drake and James—I forget his other name.
12081. Q How long was that before the disaster? A A good bit before the disaster.
12082. Q Do not know what a good bit is—approximately? A It was a few months before that.
12083. Q What is your idea of a few months? A I left Mount Kimble about eight months before the disaster.
12084. Q Then, do I understand that it was about eight months before the disaster that you found the gas? A No, it was more than that.
12085. Q How long? A It might have been about twelve or fifteen months before I left Mount Kimble.
12086. Q Now, I want you to tell us exactly how you came to find it, and what happened? A When I went to get a hole in what they call the false bottom in the 4th Left I checked my bar down—my bar was in my hat.
12087. Q You threw your hat down with your bar on the lamp? A Yes, a short light. And I could see the gas on the lamp.
12088. Q The gas is on the lamp? A Yes.
12089. Q Is that what you say? A Yes, the gas is on the flare light.
12090. Q How far up did it burn? A Just a small proportion of it. Only a small proportion of it.
12091. Q You point in that way [pointing]? Do you mean that bright from the flame where you are? A Just a flare up, a little over the lamp.
12092. Q How far back? A Just about a shot of the flare light.
12093. Q Did you report that to anyone? A I did not.
12094. Q Have you any reason for not reporting it? A Yes, I did not think that small quantity was dangerous.
12095. Q Had you discovered other small quantities? A Yes. I have seen it more than once in the same place.
12096. Q Now, about how many times altogether have you seen gas like that? A Only about twice, I think.
12097. Q Now, apart from seeing it in that way, have you seen it in any other way before the disaster? A Not I was told about it.
12098. Q Were you told by any officials of the mine? A Yes, by the night shift foreman.
12099. Q Who is that? A Frank Drangy.
12100. Q Now, I want you to tell us when it was that Drangy told you about gas? A Well, I think I would be about a month or two, I could not say to a few days, before I left Mount Kimble.
12101. Q How long was that before the disaster? A About one or two months.
12102. Q How many? Q He says he left about eight months before? Q I could not say exactly to a few days.
12103. Q Mr. Spence? Q What did Drangy tell you? A I met him going down the No. 1 mine heading, where the explosion took place. It is wrong, just like that, you know.
12104. Q You met Drangy coming down the main heading, where the heading was rising? A Yes.
12105. Q How far was it from the top of the main heading? A It was not less than 300 yards from the face where I met him.
12106. Q What took place? A He just said to me, "Look, if you had been here before us, you would have got your head blown off."
12107. Q What else? A He said, "He was standing full of gas for 10 or 12 yards back. The heading was all there."
12108. Q Anything else? A No.
12109. Q Did he say that he had done anything? A He showed it out, you know, because I went in after he had been there. He said we could get in, then, and get the stone up.
12110. Q And he told you that he had choked it out? A Yes.
12111. Q Did he tell you he had? A No, he did not say less.
12112. Q Now, do you know where it was usually that he choked it in having 10 or 12 yards of gas? A It was in No. 1 main heading.
12113. Q Where was the place that you afterwards went into that he had choked out? A No, I mean heading.
12114. Q But what part of it? A I do not suppose that, when I was there, that could have been done for past the place of the explosion.
12115. Q The men in the face of No. 1 main heading? A Yes, the face of No. 1 main heading then.
12116. Q Do you know whether there were any men working there at that time? A I think they were. Anderson and McDevitt. I am not quite sure. It is a long time ago. I could tell you who were working in the back heading.

- 12117 Q Was man working on the back leading? A John Murphy and Faddy McGinn.
- 12118 Q They are both dead. A Yes.
- 12119 Q And what about the other two men that you say were working on the main leading? A I think one is in Keshid, at Stanford Murthy.
- 12120 Q And the other? A I think he is at Keshid.
- 12121 Q Which man was Stanford Murthy? A Anderson.
- 12122 Q Now, has any official besides Drangy told you anything about gas? A No.
- 12123 Q Has Drangy told you anything at all about gas? A No, he never said anything but just that would.
- 12124 Q Did you work in Keshid as a miner? A I did not the last time I was in.
- 12125 Q Did you ever work there as a miner? A Oh yes, more than once.
- 12126 Q How long ago? A About fifteen years ago, and eighteen years ago, I worked there.
- 12127 Q At any time, when you were working in Keshid as a miner, did you ever discover gas? A Yes.
- 12128 Q Where? A In old No. 4.
- 12129 Q How long ago is that? A Between seven to eight and eighteen years ago.
- 12130 Q What was strange at that time? A No. With no flame.
- 12131 Q Was it any large quantity you found there? A When I had a shot, it bang, and, when I looked down it, it faded over, you'd look.
- 12132 Q How many yards back? A It was five or ten or 2 yards back.
- 12133 Q Did you report that? A No.
- 12134 Q Did you know whether the management knew of that? A I could not say.
- 12135 Q Why did you not report gas at any time when you found it? A If it was a very small quantity, I did not think it was any use to report it—no use when I was wearing a safety light.
- 12136 Q Now, would it be in your mind seeing that you were at, in your knowledge, of other men having found gas by mistake during that night in an anything else like that? A No. I was working alone at night time, alone.
- 12137 Q Do you know whether Drangy inspected the place within four hours of the commencement of the shift? A I am aware that he never inspected half the place, not even on the shift. That is what he should have done. But this time he did not. He told me himself he could not do it.
- 12138 Q I want you to tell me exactly when Drangy told you about not having time to inspect? A I know for a fact that he did not inspect twice in the night, then, that he did not inspect in the night before they went in, and then some back again while they were in, which is what he should have done.
- 12139 Q What did he say to you? A He said he could not do it. He had not time to do it, which I know for a fact. He avoided what.
- 12140 Q One you tell me whether any of these places on the left have been left unexplored by Drangy, in your own knowledge? A Yes, I could assure that. But I could not tell you the number of the places now. I can assure there were places that never were inspected by me.
- 12141 Q How often, to your knowledge, had they come in? A Any amount of times.
- 12142 Q Well, how often? A I could not tell you exactly the number, but a good few times, any way.
- 12143 Q I do not understand what you mean by "a good few times." Let me put this to you. Drangy should have inspected within four hours of the men starting work at 8 o'clock. You indicated that? A Yes.
- 12144 Q Now, I want to know do you say that, in your knowledge, the never inspected those places during that period of four hours in that shaft? A Yes, some places he never did. I could assure in that, too.
- 12145 Q How do you know that? A I am sure.
- 12146 Q How do you know it? A It is true I have been working in places where he never came.
- 12147 Q Do you mean that you have worked from about 2 to 6 o'clock in certain places, and he has never come there all the time you were working there? A No, after he inspected the last time.
- 12148 Q And when you did he inspect the last time? A He would start at 9 o'clock, and would be supposed to go along every place.
- 12149 Q But, after 9 o'clock at night, you know there were places which he never came to again before the men went to work? A Yes, I am sure that he did not.
- 12150 Q And you know that men did come to work in those places afterwards? A Yes.
- 12151 Q Now, about how many places were there, in your knowledge, left unexplored the first? A I could not say, exactly. I have seen a few, myself. But I could not say how many.
- 12152 Q I will tell you. — [Interupts] A I will say two or three. I have seen them myself.
- 12153 Q And are those the places that Drangy told you he had not time to inspect? A He said he had not time to go round there.
- 12154 Q Did you point out to him that he was not inspecting lower? A He said he was not.
- 12155 Q Did you say anything to him about it? I No. I had nothing to do with saying anything to him. He was alone in.
- 12156 Q Is there anything else you want to tell the Commission? A No. I think I have told them all I know.
- 12157 Q Did you go to Keshid the evening of the disaster? A I did.
- 12158 Q Were you one of any rescue party? A Yes, I went in along with Mr. Sellers and Mr. Kater.
- 12159 Q What time did you get there? A About half past 5.
- 12160 Q At that time was there any adequate supply of safety lamps for the miners? A I got one. I could not say for the rest.
- 12161 Q What part of the mine did you go into? A Straight through No. 1 Trawl Bag Road?
- 12162 Q Where you is the No. 2 Bag Road as well? A That is No. 1.
- 12163 Q That is what you meant? A Yes.
- 12164 Q What kind did you take to get in? A I went off the back of the road from the outside, and then across to the main road, down a little, and up on the left to the mine side, and straight in, and I met them coming by. When we met.
- 12165 Q Now, are you in any way up to the surface now of finding anywhere? A Yes.
- 12166 Q What can you tell me? A The only thing I saw down there was Mr. Thomas Parrell. He was sitting between two and twenty yards below the water level, and all his hair was blown off, and his whiskers too. He had not a bit of hair left on him at all, and I could not recognize him. 12167

- 12167 Q Well, who did recognize him? A He was not recognized until we came back again; and then we started him out.
- 12168 Q Anything else about the burning? A Yes, I have some more than like burnt, I saw Mr. J. B. Arthur burnt about the face, too.
- 12169 Q Anyone else? A Well, I saw young Marston—the skin was hanging off the face, you know.
- 12170 Q I do not know that I need not be put about the men who were burnt. I want you particularly to tell me whether you saw any of the features burnt? A I was not in the door.
- 12171 Q Did you notice burnt features anywhere? A There was no feature where I was.
- 12172 Q Did you notice any of the people around as burnt? A No, I did not take any notice.
- 12173 Q Did you notice where the greater evidences of force appeared to be? Q I think they started off to No. 3, a twisting road, and on the right road. That was where the biggest fire was and I could see. There were more places you had to crawl through on your hands and knees.
- 12174 Q Did you notice whether the faces were all in one direction, or in different directions? A Well, not take much notice of that.
- 12175 Q Were you any theory as to the cause of the disaster? A Well, I think it was gas—that is the only thing I can tell you.
- 12176 Q Where did you think it originated? A Not being a sailing officer, I could not say.
- 12177 Mr. Dixon: The witness has already said that he did not notice the various directions of faces, because he was too intent on doing what he could to survive, I suppose.
- 12178 Mr. Doyle: Very well, your Honor.
- 12179 Q Is there anything else you desire to tell the Commission? A, I think I have told you what I can.

Examination by Mr. Dixon Finish. —

- 12180 Q Did you form an opinion as to whether there was when you saw men burnt, or not? A None were, and some not.
- 12181 Q What evidences of burning did you see? A Some were all burnt about the face, and some were not.
- 12182 You spoke of Parnell's windows? A And his hair too. Everything was burnt off his head. I took him to be an old man. I took him to be about 40, and I do not suppose he was more than 35.
- 12183 Q What happened to the hair? A All burnt.
- 12184 Q All scorched up? A All scorched up like a duck's tail.
- 12185 Q Did you notice anything else? A No. I bent forward on his pants, I thought that he was a young man that I knew.
- 12186 Q Was there anything else about them to show burning except the skin is striped? A On Marston's neck, face, and shoulder, wherever along with him.
- 12187 Q Did you see more than one of Marston's suit? A Just one. I looked him out.
- 12188 Q Was he burnt? A He was burnt in his hair, but not the skin was hanging off his face.
- 12189 Q You had no doubt at all that these had been burnt? A Oh, there had been burnt, that is a sure thing.

Cross-examination by Mr. Barry. —

- 12190 Q I think you said it was more or less than a fortnight, years ago since you worked as a sailor? Mount Kemble? A The first time.
- 12191 Q And then you went back and worked as a coal-miner? A I went back since then.
- 12192 Q How long ago were you back? A, Fifteen years ago.
- 12193 Q I think you said that Dungey told you that after the first inspection, he never inspected some of the places twice? A He never told me that, I have not seen him since.
- 12194 Q Did you follow him through the mine? A Yes, every night.
- 12195 Q You went with him? A No, he went before me.
- 12196 Q And you saw every place he inspected? A Yes.
- 12197 Q Was that purpose of your duty? A Yes, every place that I had to go to.
- 12198 Q And you say that there were two or three places that he did not inspect? A Yes, not twice.
- 12199 Q He inspected them once only? A Yes.
- 12200 Q What reason had you to follow the foreman? A I had to follow him, it was my duty.
- 12201 Q What for? A He had to inspect the place before I could go in to take the stone up.
- 12202 Q And these two or three places, he had not been there? A He inspected them once, but not twice.
- 12203 Q But did you go into these two or three places? A Yes.
- 12204 Q And were they all right? A Yes, but they were not inspected the second time.
- 12205 Q How do you know? A Certain.
- 12206 Q Did you go round the second time? A I was there after he passed.
- 12207 Q You were there after he passed? A Yes.
- 12208 Q How long after he passed? A It might be a couple of hours sometimes.
- 12209 Q How could you see whether he had been there or not? A His date was not there. If he goes there in the night, he is supposed to put the date there, and if he goes there next morning he must put the date there.
- 12210 Q Do you tell the Court that he could not possibly inspect these places when at your mining firm? A Yes.
- 12211 Q You were that? A Yes.
- 12212 Q You did not give evidence at the inquest? A No. I would not have come here to-day if I had not been subpoenaed.
- 12213 Q When did you first tell all this information to? A To my only.
- 12214 Q So that nobody knows what evidence you had to give here to-day? A Only just about the No. 1 men looking—nobody might remember my speaking about that.
- 12215 Q I mean, Mr. Dixon, you have never given any idea of your evidence to anybody until you came here? A Only just that I might have been speaking about the No. 1 men looking?
- 12216 Q To whom? Q Once I did to the under-manager at Central, Mr. Riley, and

12107 Q Where Drangy told you that if you had been a quarter of an hour or twenty minutes before, you would have had your head blown off and you tell that to my body? A Yes, to many.

12108 Q When is that? A To the underground here at 11:00 a.m.

12109 Q When is that? A Mr. Shepley.

12110 Q And you have seen it? A Yes.

12111 Q To my body about? A I have seen it in many a time, but I cannot tell you when I have been witnessing it to.

12112 Q How many places would Drangy expect there? A Between forty and fifty.

12113 Q And when would he expect his legs stay? A We need to leave outside at 5 o'clock.

12114 Q And I think you said then, after 5 o'clock, the first inspection, he never suspected some of the places afterwards—that is, a second time? A Some of the places. He is supposed to inspect last hour before the men come on.

12115 Q How long would it take to inspect all the places? A I could not tell you.

12116 Q Drangy himself would it take three minutes a place? A It would take more, if he examined it properly.

12117 Q Would it take that? A It would take more, if he examined it properly.

12118 Q Would it take five minutes? A I could not say.

12119 Q Would it take four hours? A There does that.

12120 Q You followed him around? A I followed him in the places I had to work on. I did not follow him to all the places.

12121 Q Could you tell whether it would take one hour, two hours, five hours, or ten hours? A I could not tell you.

Examination by Mr. Hines:—

12122 Q Did you know that, by the general rule, it was the duty of the men not to work in a place unless they saw that date put up? A Yes, I mean that.

12123 Q Do you mean to say that the men did go to work although there was no date up? A The men come in, and, if they did not see the date, they ought to go back, but they did not.

12124 Q Is not it the duty of the men to refuse to do any work if they do not see both dates up? A No, my duty was to go on when I saw the first date up.

12125 Q I am talking of the men who were we keep in the end. Do not you know what the 15th Rule says—

On first entering his working place, he shall satisfy himself that it has been examined and found safe. If he does not observe the date on the wall or if he cannot remember the date, he shall go back to the main road and report the circumstances to the foreman, or to the manager, and shall not return to his working place.

Did you know of that rule? A I never heard of it.

12126 Q And you say that the men actually went to work? A Yes.

12127 Q Getting on, although there was no date put up? A I could not tell you whether there were any dates or not when the men went in.

12128 Q But did not you say he did not inspect time? A Yes.

12129 Q And therefore had not put the second date up? A I never saw the second date.

12130 Q And yet the men had gone in and worked? A Yes.

12131 Q Can you tell me who those men were who went in and worked without the second date being up? A No, I could not tell you.

12132 Q No proceedings can be taken against them, as you need not be afraid. Can you name any one man, or more, if you like, who went in and began work, getting coal, although the date had never been put up there by the deputy? A I could not tell you, but I know for a fact that was the case.

Further cross-examination by Mr. Hines:—

12133 Q Well, you undertake to say that he did not put the second date up before the men went in to work? A I would not swear whether he put them back up at once or not.

12134 Q You will not swear? A No.

12135 Q Did you see one date or two dates? A I could not say now.

12136 Q I think you said that the men come in, and, if they do not see the date, they ought to go back? A They ought to, but they never did.

12137 Q Did you ever see them go back? A No.

12138 Q Did you ever go back yourself? A I was not working on the end.

12139 Q Tell me in my name what you have written on the date on the end? A No.

12140 Q When the second date always up for you? A I never worked on the end at Kilmartin the last five years.

12141 Q They had different rules then from what they have now? A Yes.

Further examination by Mr. Hines:—

12142 Q You say he may have put the two dates at the one time? A He may have done so.

12143 Q Can you remember any occasion when he did do that, of your own knowledge, that is, that you saw him put both dates with the chalk? A I was away in the place when he put the two dates.

12144 Q Did you see anyone say please with the two dates up when you first went in? A No.

12145 Q Have you ever known him to put the date down on during the first inspection? A No, I never knew him to do that.

Examination by Mr. Hines:—

12146 Q Do I understand you to say that, after you had gone on, or left where in a place, you had been examining, working three years when the date 1 (1) they go to work once out, and that is the reason you say that you know he had not made the inspection with the date before before the men went to work? A Yes, I know he did not, that he had not been in the place.

12147 Q You were working in some place after it was built or is here been outside? A Yes.

[Witness dep.]

Mr CHARLES DOUGHERTY was sworn, and assumed as under.—

Examination in-chief by Mr Barry —

- 12159 Q What is your name? A Charles Barry.
- 12160 Q What are you? A I am a Deputy at Mount Kembla.
- 12161 Q How long have you held that position? A About four months, I think, since a month after the explosion occurred.
- 12162 Q Is it since the disaster that you have entered upon your duties as a deputy there? A Yes, since the disaster.
- 12163 Q What does *you* work consist of at the present time? A It mainly consists of examining the waste workings.
- 12164 Q Do you do other work? A Yes, I do other deputy work, sometimes a day or two.
- 12165 Q How long have you been at Mount Kembla altogether? A Fourteen or fifteen years.
- 12166 Q Have you been working on the coal down? A Yes.
- 12167 Q How many years? A About eight years.
- 12168 Q Have you worked in different parts of the mine? A Yes, some parts I have not worked in.
- 12169 Q When was the last time you worked there, about how long before the disaster? A Well, I was working nearly the whole thirteen years before.
- 12170 Q How long before the disaster? A I worked there up to the day before.
- 12171 Q Had you been working continuously there some months in the mine? A Yes.
- 12172 Q Now, when you were working on the coal, can you tell the Court if you ever came across any gas there? A No, not when I was working on the coal.
- 12173 Q You have heard or seen some evidence with reference to the disaster, that they have gone back to the face and got it up, have you ever seen anything of that sort? A Yes, I have, on a couple of occasions.
- 12174 Q What was that? A Well, just a small light I have seen there after a hanging shot.
- 12175 Q You have heard something about blows of gas, have you not? A Yes.
- 12176 Q Do you recollect on any occasion seeing two men being a hole in the mine and tamping it up? A Yes.
- 12177 Q Where was that the time? A, I was not there when they were tamping the hole. I was there after it had been holed, I saw it when it was stuffed up.
- 12178 Q I think you say you have seen some faces after hanging shots? A Yes, I have seen some faces with hanging shots.
- 12179 Q How far back did that face go on the two occasions when you saw it? A It did not go far back. It seemed to be confined to the face in where the shot was hanging.
- 12180 Q You have heard a good deal about the hanging sounds in the mine? A Yes, I have heard hanging sounds.
- 12181 Q Have you heard water come that would, too, in the mine? A Yes, I think the water sometimes, in some places, where there is water down out of the shaft. I think so.
- 12182 Q Do you think there is any difficulty in detecting the sound caused by gas and that caused by water? A I find some difficulty.
- 12183 Q You would not be sure about it? A I would not be sure.
- 12184 Q Now, with reference to the ventilation at Mount Kembla, have you found the ventilation there good or bad? A I have found it mostly good, so far as my knowledge went.
- 12185 Q With reference to the furnace, what has been your experience at Kembla, since you have been down and particularly, does it burn all the year round? A It does now.
- 12186 Q Did you say different experiences years ago there? A Well, I have seen the air reversed.
- 12187 Q How do you account for that, what caused it in your opinion? A I think it is that the furnace — (interrupted).
- 12188 Q The furnace? A That the present furnace is the old furnace. A The present furnace. That is, some years ago. I think it must be quite some time since I have seen the air reversed, except once or twice, and that is since the explosion when the furnace was put out for some time.
- 12189 Mr Barry Q You know what a multiple burner means? A Yes.
- 12190 Q Now, in view of the situation at Mount Kembla, would a strong suddenly burning change the air? A I do not think it would if the furnace was slight. It would do it in any other case, or any change of heat would do it, when furnace ventilation is carried on.
- 12191 Q At the time you discovered that the air was reversed, was that on a Saturday? A Oh, I could not tell.
- 12192 Q Were the men all stopped working? A No. I have seen it when going in to work years ago; but it has been long reversed again the night way, but it was long ago, and I never noticed it only now or once out of the hundred months, I could not tell the exact time when it was reversed again.
- 12193 Q Now about the waste workings, what do you do with respect to the waste workings? A I examine them.
- 12194 Mr Barry Q I speak with every respect that it is considered what he does now.
- 12195 Mr Barry Q He was not deputy until after the disaster.
- 12196 Mr Barry Q Well, then, what is your experience what have you seen there during it? I hope you have been working there in a mine — here you saw the furnace or the deputy there inspecting the different places? A Yes, I have seen them working.
- 12197 Q Inspecting the working places? A He went in once in every day while we were at work, once a day, and under the daily examination, once in a day. In the morning we would not see him come in, but we would know that by the smoke on the coal.
- 12198 Q Have you ever seen him inspecting the waste workings? A No.
- 12199 Q Have you ever seen any of the officials inspecting the waste workings? A No.
- 12200 Q Had you ever seen on the part of a woman before you were personally appointed to this position which you had now? A No, never.
- 12201 Q Have you ever changed the position of Clerk assistant? A Yes, I did once.
- 12202 Q How long was that before the explosion? A A few months, but I could not tell exactly. I do not remember the date.

12302 Q Did you go round with Nelson? A We went with Nelson, in our portion of the race; and we went with Mr. Lusk, the under-manager, another time.

12303 Q Do you remember whether on that occasion, Mr. Rogers, the Manager, offered you any assistance?

12304 Mr. Lusk? Surely this is somewhat leading the witness. It has been throughout. I did not like to object before.

12305 Mr. Barry? Q Did you see Mr. Rogers there? A Yes, but not when we first went there.

12306 I asked the question, your Honor, because some evidence has been given that Mr. Rogers tried to help in some way.

12307 Mr. Barry? Put it in this way, as to how Mr. Rogers pushed them. There can be no objection to that.

12308 Mr. Barry? Q How did Mr. Rogers receive you? A He acted very well. At first he was not there, and we had a bit of trouble about it, because he was not entitled to the permission of the clerk-in-charge for the district, and the under-manager was speaking through the telephone in connection with it, and then we saw him, when we went over to the daylight tunnel to make the inspection, and I did not see him then until we had finished the inspection, so we did not speak much in connection with the inspection at all, only we were talking of the race. I could not remember all that we said.

12309 Q Did you make your own inspection on that occasion, or make your own report? A Yes, I wrote the report in connection with the other problems, the district check inspection.

12310 Q Did anyone, either directly or indirectly, attempt to interfere with you in any way in making that inspection? A No.

12311 Q Do you recollect the 9th of August last? A No, I do not.

12312 Q Do you recollect having an appointment with Mr. Kridler to go into the mine? A Yes.

12313 Q Did you go into the mine with a certain number of persons on that date? A Yes.

12314 How did you go in, all together? A Yes, or near together so we could get it. It was a very rough and, and, and of an even more dangerous kind than the others.

12315 Q There were different parties of you? A Yes, all in the same party.

12316 Q You were not all on a dumper, but you were in one after the other? A That is it.

12317 Q Do you recollect last 9th? A No, I cannot remember the number.

12318 Q What part of the mine did you inspect on that occasion? A Well, we inspected the main headings, the back heading, and the top line of north-throw, where a proven amount of lead had been working, and we went to other places, but I cannot remember the exact places. We went to the 4th Right.

12319 Q Do you think you could just walk out for the Court on that place the mine you took? A No, I could not.

12320 Q Can you describe now, shortly, what occurred, what inspection you made, that is, the places you visited? A Well, we started the back heading, and Anthony's place, and we went into the 4th Right, and we inspected the main tunnel, right from the tunnel south to.

12321 Q I believe you were at some time more experienced with reference to the mine, and you happened to mention the fact to Mr. Kridler, and he asked you to go in with him? A Yes, I expressed a desire that I might go in to Mr. Kridler.

12322 Q Then you went in, and you got up to where? A The 4th Right is one place, and then the main heading, and then Anthony's place, and all the top line of north-throw, and every place we went to that night that I could not say. We were not in there, and they were going down where to go, and I did not see all readily where I was. Things were spent that night.

12323 Q Did you see Kridler when he was carried out? A I helped to carry Kridler out.

12324 Q Where was Kridler taken from? A He was taken from the back heading, that is where he was found.

12325 Q Did you notice how when he was being taken out? A I did not see his face. I noticed Moore's hands and arms.

12326 Q What state were they in? A The hands were swollen up like that [indicating a swelling on the back of the hand about an inch in depth], and I cannot say if they had been hurt or not.

12327 Q Have you seen the doctor leave through the mine for the purpose of ascertaining, or gaining some information, in order for him to come to any conclusion as to what was the cause of the disaster? A I have been through the mine in the discharge of my duty.

12328 Q Have you formed any opinion? A No, I cannot form any definite opinion.

12329 Q Have you any idea, or have you any opinion, where the trouble started in the mine, which caused the disaster? A I cannot give any definite opinion where it started, except that it was in the 4th district, as appeared to be there, either from the top mine—I cannot give any definite opinion. I have tried to look at definite opinion, and cannot, as to where it started.

12330 Q There are too many contradictory signs of force for me to determine where it started.

12331 Q Do you know what grey dust is? A Yes.

12332 Q Have you seen any grey dust in the mine? A Yes, after dark. I have seen grey dust after a fall.

12333 Q Now, what is the colour of the rock in No. 1 Right, is it one colour or various colours? A I think it varies, I am not sure now. I think it is mostly yellow.

12334 Q The 4th Right? A That is yellow, in my opinion.

12335 Mr. Bruce Smith? Q The 4th Right is the one going into the shaft? A Yes, I have been in there; and I know it is yellow.

12336 Mr. Barry? Q Have you had any chalk since you have been in the mine? A One or two.

12337 Q What kind you find there with a machine or an apparatus? A The day I find there it was with an apparatus. I find there in No. 1, before the repairing was finished.

12338 Q How is that dust? A It is done with a little cap. It is a kind of machine, I do not know the name, but a machine, and there is a little cap, and a few inserted into the cap.

12339 Q I presume there are a dozen ways of doing all that dust? A Yes.

12340 Q Can you say whether the mine, before this explosion, was wetted, from what you saw? A I could not say directly.

12341 Q What is its state now, or since the disaster? A Well, most of it is in a damp state.

Witness C. Dugan, 5 February, 1906.

- 12341 Q Can you tell the Court the number of ways out of the mine? A Few ways that I know of.
- 12342 Q You know John Morrison? A Yes.
- 12343 Q His given evidence here to-day? A I know him.
- 12344 Q Have you worked with him, or under him? A I have worked with him.
- 12345 Q Where you worked under him? A No.
- 12346 Q Not in the mine under him? A No.
- 12347 Q Had you any previous experience, before going to Mount Krumboltz? Have you ever worked at Mount Pleasant? A Yes, once, years ago. I worked there about twelve months, when I was a boy, 15 or 16, that is all.
- Cross-examination by Mr. Loughty.—
- 12348 Q Do I take it, then, Mr. Dugan, that you have had no practical experience of gas? A Oh, yes, I have had some practical experience of gas.
- 12349 Q Where did you pick it? A Well, I have only seen gas once in a safety lamp.
- 12350 Q Where did you get your practical experience of gas? A At Krumboltz.
- 12351 Q At Krumboltz? A Yes.
- 12352 Q When? A Well, I found gas there about a month ago, a small quantity of gas.
- 12353 Q A month ago? A No, it is not a month ago. It was about the 1st of last month. That is about the last gas I have actually seen in a safety lamp.
- 12354 Q And is that your practical experience of gas? A Oh, well, that is all you require, I think.
- 12355 Q Well, is it? A Yes, that is all.
- 12356 Q And you have been a deputy how long? A About four months.
- 12357 Q So that you were appointed a deputy without having had any practical experience of gas at all? Is not that a fact? A Yes, I had never seen gas except—[interrupted].
- 12358 Q No, I am talking of practical experience of gas? A Yes.
- 12359 Q That is the fact? A Yes.
- 12360 Q And at the time you were appointed deputy you held no certificate? A No.
- 12361 Q Did any person put you through any examination before you were appointed deputy? A Yes, I was asked more things, how to examine for gas—[interrupted].
- 12362 Q By whom? A By the water manager.
- 12363 Q What is his name? A Mr. Hendrix.
- 12364 Q When was that? A It was not after he came here.
- 12365 Q Now, how long was Mr. Hendrix examining you? A He asked me while we were going toward together, he asked me how I would examine for gas, and how would I tell certain percentages, and I told him, that is all.
- 12366 Q That is all while you were walking round? A Yes.
- 12367 Q Corral questions, that is all? A Oh, no, not corral questions.
- 12368 Q It was only an oral examination, when you went round with him? A Yes, was before I undertook my duties, and he took up all round together.
- 12369 Q That is only an oral examination? A Yes.
- 12370 Q And he took you all men of together, the men who were to be appointed deputies? A No.
- 12371 Q Who went with you? A I did not see my deputy John Morrison was there, and myself. I think there were only three in that corral. I cannot remember exactly.
- 12372 Q Now, looking down the examination you went through was a few questions from the water manager as to how to test for gas, is not that so? A Yes, he asked me how to detect gas, and different questions about—[interrupted].
- 12373 Q And once that you were made a deputy? A No.
- 12374 Q Were you asked any other questions by the Manager? A Yes, I had a conversation with him months before, before the explosion, in connection with the deputizing there.
- 12375 Q With Mr. Dugan? A Yes.
- 12376 Q Did he examine you as to your knowledge of gases? A Yes, he asked me several questions, and he made inquiries of not technical matters, and different things.
- 12377 Q I do not want it as to your practical knowledge, as far as the Manager is concerned. Then you did not report to the management that you had any practical knowledge of gas, did you? A No, I did not.
- 12378 Q And your duties as deputy included shot-firing? A No, not always. On one occasion I was sent to do some.
- 12379 Q Part of your duties would be to fire shots? A No.
- 12380 Q Will you tell me why it was that you fired three shots? A On that day I was appointed to do it, and that is the only day I have been appointed to do that kind.
- 12381 Q Do you know that they were fired shots in the mine, Hendrix with the safety light, lighting the fuse with the safety lamp? A Yes, I believe they were.
- 12382 Q Did you not see it done? A No.
- 12383 Q Is it not a very dangerous practice? Remembering that you have now a month close into it, it is not, in your opinion, a very dangerous practice? A I do not think so, when there is no gas.
- 12384 Q Do you think it is a very safe practice? A Well, I think it would be better to have the other.
- 12385 Q Will you not admit that it is a dangerous practice? A No.
- 12386 Q Is not the examination beforehand only made with the safety lamp? A Just so.
- 12387 Q And do you not know that they will sometimes test them about by gas test, of gas? A Yes.
- 12388 Q And do you not know that I give rank as dangerous in certain dusty conditions? A In certain places.
- 12389 Q Now, will you not admit that, if your lamp will only detect down to 5, per cent, it may be dangerous, because there might be gas there in dangerous quantities and not detected? A No.
- 12390 Q Do not you see that there may be less than 2 per cent, of gas present, and it may not be detected? A Yes, I see that.
- 12391 Q That being so, if you examine, because you test with the ordinary safety lamp, that there is no gas there, may you not be making a wrong assumption in thinking there is no gas there? A Yes.
- 12392 Q I mean, may you not be making a wrong assumption in thinking there is no gas there? A Yes.

12125. Q And, if you make that wrong assumption, is not there a risk of danger in firing a shot with a naked light? A Yes, where the safety lamps are used, they have to, according to the Act, wear the place if it is dry and dusty.

12126. Q I will come to that afterwards. Is it not manifestly dangerous, when the assumption that there is no gas there may be wrong, to fire the shot with the naked lamp? A Well, it is no proven anywhere to have a shot at all in mine, so far as that goes. There is always a certain amount of danger with a blow-out shot.

12127. Q And is not there a considerably greater amount of danger in firing it with the naked light instead of the wire? A Yes, I cannot say it is a very dangerous position.

12128. Q But is not there a considerably greater danger with the naked light than with the wire? A No, I do not think that there is, at all, not when it has been examined, and when the place is watered thoroughly.

12129. Q You do not know, of your own knowledge, whether the places were watered where the shots were fired with the naked light, do you? A Well, yes.

12130. Q Then you do know where those shots were fired with naked light? A I used to know the places.

12131. Q And do you know who fired the shots with the naked light? A Yes, I know, but I cannot say there is it.

12132. Q What? A Forsyth was one, Livingston, and David Evans, and several others.

12133. Q So that, since the disaster, it has been quite a common practice at Kanab to fire the shot with a naked light? A No, it has not been a common practice. It is called so who fired the shots, you did not ask me "with the naked light."

12134. Q I am speaking of the firing of shots with the naked light? A There were not so many firing that.

12135. Q Was David Evans doing that? A No.

12136. Q Now, I want to know whom did you know to fire the shots with the naked light? A I know of two.

12137. Q Who? A Forsyth and Livingston.

12138. Q Were you present where they were fired? A No, I have never been there at the actual time.

12139. Q Then you do not know what the conditions were at the time of the firing of the shot? A Well, yes, I have seen it afterwards.

12140. Q I am speaking of at the time? A At the time I was not there, but still it is like this—I was not there actually when the shot took place, but I have been there shortly after a shot, and, of the place was in a damp condition or dry before the shot, it would naturally be the same afterwards, and, as I concluded that it was in that state at the time the shot was fired.

12141. Q Do you mean to tell me that there were no dusty places there when any shot was fired? A No, I do not think there were.

12142. Q In view of some evidence we have had, will you swear that no shot was fired in a dusty place after the disaster? A I would not swear that.

12143. Q Now, I do not think there is any evidence that a shot has been fired in a place that was dusty.

12144. Q Yes, there was the evidence of Quigg, and Charles Smith also, I think. Smith and he did not appear at a mine firing with a naked light, when he (Smith) was required to use a safety lamp.

12145. Q Mr. Evans said, I do not think, now if the evidence has been given, that it is time to submit a witness that certain evidence has been given.

12146. Q Yes, it is not right.

12147. Q I wanted to show that he did not only know the conditions at the time those shots were fired, and to bring him back to the fact that it was a dangerous practice.

12148. Q Now, I want to question for the Chairman then suppose also, the question whether it was dangerous.

12149. Q Yes, I agree. Very well, your Honor.

12150. Q Now, with respect to the inspection you made with Juchard, do you know that Juchard stated that you did not examine one half of the bolts at the pillars, beyond your comment—[interrupted]

12151. Q Mr. Evans said, No, they were "amused."

12152. Q Yes, I agree. Q You inspected with Juchard? A Yes.

12153. Q Two were the check inspectors with Juchard some three or four months before the disaster?

A Yes, on one occasion.

12154. Q You do know that Juchard has stated that on that inspection you seemed that more than one half of the places were right, because the witness said that you went into was all right? A Yes, I heard he said that.

12155. Q Well now, is it true? A It is not. We went to more than one half of the places.

12156. Q Yes, then, I will not say it mostly to hold. May I take it from you that there were at least one third of the places that you never went into at all, but assumed that they were right? That is giving you a good margin? A Well, there were some we did not go into, if that is what you mean.

12157. Q I am not making any suggestion that you did wrongly, at present. I do not want you to think that I am going to blame you, at present. But I tell you, in that part of the evidence true, that there were a large number of places that you did not go into and inspect at all? A Not a large number. We missed a good many, but I believe we did more than two thirds of the places. That is what I visit, anywhere.

12158. Q Well now, you did miss a good many? A Yes.

12159. Q Do I understand pillars and bolts? A Yes, we missed some pillars, and we missed some bolts.

12160. Q The process was, on that inspection, to go and inspect, say, one bolt, and miss the next couple, and go in another bolt, and miss the next two or three, that was the mode of inspection? A Apparently we thought likely to go, if the order manager was going on, we would say, "Well, well we go in here," and I used to think we only had and the District Clerk Inspector when to go.

12161. Q So that, you said, when the order manager took you? A Oh, no.

12162. Q But not you say that where the order manager was going is you would go? A No, you made a mistake, where the order manager was going along we would walk behind him, and go in some place where he was not going, that is what I mean. We went just where we thought necessary. We missed, our discretion.

12163.

Exhibit—C. Harris, 2 February, 1968.

12493. Q Is it not a fact that the under manager said you need not go up a number of floors on the 4th floor? A I do not remember anything being said about that.
12494. Q Will you agree that that part of Jankovic's evidence is not correct? Will you agree that the under manager did not say that? A I will agree I did not hear it, or I do not remember that I will agree, actually, that we were upstairs of the situation, and could go where we wanted.
12495. Q Do I understand from you that you went wherever Jankovic suggested? —[Interrupted]
12496. A Yes.
12497. Q He has never said that, or anything like it.
12498. A He said to, at times, when to me, and I used to refer to him.
12499. Q And did you not say that you used to refer to him Jankovic whether you would go into place or not? A At times.
12500. Q May I take it that you would be guided by Jankovic as to whether you went into that particular place? A No, he was partly guided by me, and I was partly guided by him.
12501. Q Do you not know that Jankovic stated that he wanted us early to you to take him to the place? A He might have said it, and he might have thought it, too.
12502. Q Now, what I want to know is, had you any reason for not going into those places on the 4th floor? And we show you on the plan exactly, and you think before you answer? A I could not be sure of the places we went to that day. We went to the 4th floor, because those are the places I wanted to go to.
12503. Q You have not a plan like this for days and days? A Oh, no.
12504. Q Do you mean to tell me you have never seen one like that? A Yes.
12505. Q Have not you studied it? A I could not say.
12506. Q Do you not know where the 4th floor is, those places on the 4th floor where Action and Taxi and all these men were working? A Yes, I was there yesterday.
12507. Q Now, is it not a fact that you did not go in at least one-half of those places during that short impromptu? A No, I will not say that, I believe we went into most of those places. We went to most of the men places on that occasion.
12508. Q Have you read Jankovic's evidence? A Yes.
12509. Q Where did you read it? A I read a portion of his evidence in the paper, and I have been told about what he said.
12510. Q Where did you read Jankovic's evidence? A In Sydney, about a week ago.
12511. Q Will you show it to me? A I read it in the paper, nobody showed it to me.
12512. Q Do you mean to tell me that you have not seen a typewritten copy of Jankovic's evidence? A No, I have never seen anything of his evidence, only what I have heard men talking of what he said.
12513. Q Were you in Sydney when Jankovic gave his evidence? A Yes, I was in Sydney.
12514. Q Now, did you not see it reported in the Press that Jankovic had stated that he had not examined more than one-half of those places on the 4th floor? A Yes, I saw that, but I take it that he has made a mistake, because he did not know the places as well as I did, and I did not know them too well up there at the time. I had never worked up there, and I do not see how Jankovic could know the well the exact places we went to.
12515. Q Do you mean to say that nobody has ever said to you, or that you have not seen, a complete copy of Jankovic's evidence typewritten? A No.
12516. Q Have not you given any statement of your own evidence? A I have given a little statement when I was in Sydney at the examination.
12517. Q To whom did you give that statement? A To Mr. Wade.
12518. Q And were not you then told what Jankovic had said? A He said a few things that Jankovic had said.
12519. Q And did not he read it from the typewritten copy? A No, he did not.
12520. Q Is that the only statement that you gave? A Well, to day I was talking to Mr. Barry.
12521. Q Well, before to day? A No, I have given up other statements since I was arrested.
12522. Q Do not you know that your name was mentioned in a witness as the back of those weeks ago at Melbourne? A No, I do not know, except that Morrison told me that I would be likely to be there. We were talking and speaking of who would be there, and he said, "Oh, you will be there", and I said, "I do not think so, I do not think they will want me." That is all that I heard. I was surprised when I got a [naming the witnesses].

[At 5 p.m. the Commission adjourned until 2 p.m.]

APPENDIX

(On resuming at 2 p.m., Mr. W. E. Frost attempted to take shorthand notes of the evidence and proceedings.)

CHARLES BIGGERS previously sworn, was further examined, as under—

22490. Mr. Biggers. Q At the time of the clock-regarding you had to depend on Nelson where to go? A Not exactly. I would not know where I had been, but I had been in that district before.
22491. Q Would you know of any of the places not at work? A No.
22492. Q When you observed Mr. Nelson run past a place, you would stop him and go into it—a working place? A I would stop and say, "We had better come in here."
22493. Q After Nelson had passed? A Very often.
22494. Q Did you observe Nelson hurry past any different places? A No.
22495. Q Did you not see him to stop him when you wanted to go into various places? A We would stop him.
22496. Q Would you tell him back and go into a place that he had passed? A Yes, if we had occasion.
22497. Q Where are any of those places on the 4th floor where you had occasion to tell him back? A I cannot say exactly where they are.
22498. Q During the whole of the three days' suspension the job was not working? A No.
22499. Q Did you ask the under manager whether the men were working in any particular place or whether they were not? A We knew there were no men in the mine.
22500. Q Were any places long idle permanently or where they had finished work? A Yes.
22501. Q Can you tell me of any place that you must take which was not being permanently worked? A No, I cannot say.

12475. Can you remember going into any place not being permanently worked? A Yes, in the shaft district.
12476. Q I mean No. 1? A No.
12477. Q Did you go onto the top of No. 1 Main heading? A Yes, I think we went to that.
12478. Q You think, cannot you remember? A It is a long time ago, and I have had many things to divert out of my mind since then.
12479. Q Can you remember whether you went onto the top heading? A I cannot remember.
12480. Q To the top heading—you remember No. 1 Main Level? A They were not up that far.
12481. Q Did you go into the place as far as it had gone up? A I cannot be sure.
12482. Q And they not the places which Joshua and were passed? A I cannot be sure, I cannot be certain whether we went in there or not.
12483. Q Who had the safety lamp? A Nelson.
12484. Q Do you remember any remark being made when they saw the safety lamp? A No, I do not remember. I heard that Joshua said so. I do not know.
12485. Q Will you say that it was said? A I will not swear that it was not said.
12486. Q Will you tell me anything that Rogers said about it? A We in mine talk with Mr. Letch.
12487. Q Do you not remember the remark being made that gas had not been found for the last twelve months, and that you did not want the lamp there? A Two men by Letch.
12488. Q Do you remember his saying that you did not want a thing like that there? A No, I do not remember any one of them saying anything like that. The safety lamp was brought there, and we could not get it to work. It went out. Before anyone had spoken about it it was a settled thing that we should take the safety lamp, but we could not get it to burn. Then was the time that this under-manager said, "What are you going to do?" He said, "You can get another safety lamp, or close this, or do as you like, but I have not seen gas for twelve months." Joshua said, "What will you do?" I said, "We have seen no gas", and we went into the shaft district.
12489. Q Did you go onto No. 2? A We had the safety lamp with us in No. 1. Nelson had it.
12490. Q Nelson had one? A Yes, Nelson went first and remained in front. We all went up with open lights in the face.
12491. Q Was that after an examination had been made with the safety lamp by Nelson? A I cannot say.
12492. Q The only person who had the safety lamp was the under-manager? A He was deputy at the time.
12493. Q The only person who had a safety lamp was Nelson? A Yes.
12494. Q He went into the place first to see that it was safe before you went with a naked light? A Yes.
12495. Q You did not go into one-third of those places at the top of No. 2? A Yes.
12496. Q Do you not know that the safety of a mine, as far as gas is concerned, depends on the safety of every particular place? A Yes.
12497. Q It is like a chain which depends on its weakest link?—[Interposed.]
12498. My theory? Should not the witness be allowed to finish an answer?
12499. My theory? The witness certainly ought to be allowed to finish answering a question.
12500. Mr. Higgins? Q Do you want to finish any answer? A I want to say that, if all the places were together, it is incredible that gas would be found in one and not in the one next to it higher up. If I had to choose I would go to the one.
12501. Q Right, there can be a flow of gas in the one you did not go into? A It might be possible to find gas coming from anywhere.
12502. Q Was not your suspicion, when gas is concerned, practically useless as a check inspection? A I will not admit that.
12503. Q Did you mention anything in the report about gas? A I have not seen it since, and I have no copy of it.
12504. Q Can you remember whether Nelson and it was no good to go into the top heading because there was nothing there? A I cannot remember.
12505. Q You will not say he did not? A No.
12506. Q There substantially Joshua's evidence is correct? A I do not know it.
12507. Q You do not know? A It is not correct about the hydrogen flame, or about stimulating.
12508. Q Is there anything that you take exception to in Joshua's evidence, as far as you saw it? A Yes.
12509. Q What did you object to? A That we were intimidated from going in.
12510. Q Joshua never said anything about it? A Some of the men were talking about it.
12511. Q I tell you so. Joshua never said he had been intimidated? A I have heard them talking about it.
12512. Q Did Mr. Rogers tell you? A No.
12513. Q Some of the management? A Some of the management.
12514. Q What was in Joshua's evidence do you take exception to? A I do not know it. Had the evidence at me, and I will tell you.
12515. Q Well, there is nothing further so far as you know of it that you want to take exception to? A Nothing further.
12516. Q Now you talk about a hoarse sound, and that sometimes it comes from water? A Sometimes.
12517. Q And in the majority of other cases, what is it caused by? A I should say that it was caused by either gas or water, and they used to try and find the gas.
12518. Q Did you never know of gas being found in Kibble before the disaster? A I have heard of it, and have seen gas here years ago.
12519. Q When was the last time? A Years ago, when I was a boy.
12520. Q Where was discovered it as lighting after a shut? A I have seen it after a hole was made and they would not let the shot because the gas was going off.
12521. Q You know that a large number of men died from the effects of after-damp. In view of that fact, and what you have as to the cause of all gas, have you formed any theory as to what was the probable cause of the disaster? A, I have a theory as to the probable cause.

- 12520 Q What theory? A The probable cause was the gas.
- 12521 Q You think that most probably gas would be the cause? A Gas and coal dust.
- 12522 Q Have you any doubt that it was an explosion of gas and coal dust? A I am not ready at that point.
- 12523 Q Were you any honest doubt? A Yes, I have.
- 12524 Q After hearing of gas and of coal dust, what else would it be? A I have heard of the likelihood of a hot downy.
- 12525 Q Apart from that, you say nothing any other cause than gas or coal dust? A No, I cannot.
- 12526 Q I suppose you admit that that fire, being on the highest part of the mine, would be the most probable place for gas to accumulate? A Yes.
- 12527 Q And that that would probably be the original seat of the disaster—the vicinity of the 9th level? A I cannot say where the original seat of the accident was, I have no idea.
- 12528 Q Your conclusion led you to adopt that place—the highest part of No 1 Main Tunnel? A No. I have not seen any force in the opposite direction. That is what is passing to me.
- 12529 Q As far as you can offer an opinion, you say that it is an explosion caused by gas and coal dust? A I do not offer any opinion.
- 12530 Q Can you tell us whether you observed that the furnace was burnt? A There was a little boiling in the main leading.
- 12531 Q At the top? A Yes.
- 12532 Q You know that a number of bodies were burnt? A I do not know of a number.
- 12533 Q But there were some? A There were some who had the appearance of being burnt.
- 12534 Q In the top leading? A Yes.
- 12535 Q Have you any doubt that they were burnt by an explosion of gas? A I have no great knowledge of the matter.
- 12536 Q (After a pause) Is not my way examining the witness on the matter. There are the facts from which the Commission can judge.
- 12537 Q Mr. Spence? Q How often has the furnace been repaired? A Once.
- 12538 Q How often have you seen the air stationary, hanging in the balance? A Only once, when the furnace was out of repairs, and there were only two or three of us there.
- 12539 Q You said that sometimes the furnace did not burn properly. Did the workers would have any effect upon it? A I do not know.
- 12540 Q Then what do you mean? A Sometimes the fire was backed up; there were not so many men there then as I tell you.
- 12541 Q The furnace was not sufficient to supply the ventilation? A While men were at work, the fire was always there. Two barrels of air entered when the mine was full for two or three days.
- 12542 Q Now I will ask you with regard to three Recommendations No. 1—“Manager, underground, duplicate, and shot-down to hold certificate of competency by examination, and to have had the year practical mining experience, before being eligible for their respective positions?” A Yes, I approve of that.
- 12543 Q Recommendation No. 2—“Inspection to be vested with absolute power to order use of safety-lamps.” Do you approve of that? A Yes.
- 12544 Q Recommendation No. 3—“Ventilation by furnace prohibited, and flow substituted.” Do you approve of that? A I would not like to give an opinion on that.
- 12545 Q I come to Recommendation No. 4—“All places, exceeding prospecting drive, to have cut-through not more than 50 yards apart.” A Yes. That would be good. It would be safe.
- 12546 Q Recommendation No. 5—“An extra supply of safety-lamps and their requisites equal to one-third of the number of persons employed to be kept constantly in good order and ready to use.” Do you think the extra supply of safety-lamps ought to be kept? A Yes.
- 12547 Q You had difficulty at the time of the Kamla disaster in getting lamps? A We had difficulty in getting them in light.
- 12548 Q They would not work? A No.
- 12549 Q And there was some delay in the rescue parties bringing out the men? A There was some delay.
- 12550 Q Recommendation No. 13 is that “Twisting and leading rock, and other places necessary, be properly watered?” A I agree with that.
- 12551 Q I will pass on to Recommendation No. 15, that “Instructions be given to employees regularly on means of escape?” A Yes, I agree with that recommendation.
- 12552 Q And who do you think should give the instruction? A Any deputy who knows the road, or any official.
- 12553 Q The deputy? A He would do.
- 12554 Q Would you have the instruction given once a quarter? A Yes, I believe that would do.
- 12555 Q You believe that that would be produced as a result of carrying out the recommendation? A Yes.
- 12556 Q Recommendation No. 16 is, then “Safety-lamps should not be checked for shut-down?” A I approve of that, too.

Then read by Mr. Bruce Smith:—

- 12557 Q When you spoke by four months ago about my mode of deputy? A Before the disaster?
- 12558 Q Before the disaster? A Yes.
- 12559 Q By whom? A I spoke to the Manager.
- 12560 Q Did you speak to him, or did he speak to you? A Well, I spoke to one of the deputies that I had asked as an examination for a second class certificate, and I thought it might be because of my not being as efficient as the man. I talked to Bruce Smith about the matter, and he said, “Oh, you should try and get a position,” and so I spoke to the Manager about it.
- 12561 Q It was a dream or your part to get a position? A Yes.
- 12562 Q You were never approached by the Manager with regard to it? A Not before I spoke to him.
- 12563 Q And afterwards representing the man approach you or ask you if you would care to take that position? A No.
- 12564 Q You told Mr. Henry that you never came across gas while looking for coal? A No.

- 12598 Q How often, before the disaster, did you meet with gas while working in any capacity? A I could not say how often, but two or three times. I have seen little flames.
- 12599 Q Only little flames? A Yes. I have never come across any lighted, but I have seen such light.
- 12600 Q You are thoroughly impressed with the fact that there was gas in the mine, because you came across it three times previously, and now when light? A Of late years I did not think that there was any.
- 12601 Q How long ago is it since you met it? A Eight or nine years ago.
- 12602 Q And when you saw such light? A Somewhere about the same time. It was when some men were working on a hole.
- 12603 Q Then, from eight or nine years ago, up to the time of the disaster, you never saw gas at any time light? A No.
- 12604 Q When you say that you have seen a light after being a shot, was that eight or nine years ago? A No.
- 12605 Q Then you do not believe that? A I think that was fire-damp, or we called it powder-smoke.
- 12606 Q How often have you seen powder-smoke go off? A Twice after a longing shot.
- 12607 Q You say that you heard a hoarse sound, but you do not know whether it was water or gas? A Yes.
- 12608 Q And you tried to find it with a light? A Yes. I could not find it, and I took it for granted it was water.
- 12609 Q How many times have you seen the air renewed in that mine in all your experience? A I could not say; three or four times.
- 12610 Q What did you attribute it to? A I took it to be because the fire had gone out, and the wind had reversed, and changed the circulation.
- 12611 Q Did you receive the law? A No.
- 12612 Q You did not look to see whether the reversal was the result of having broken the fire? A No.
- 12613 Q When it was reversed, you said that there were only a few men working in the mine? A That was on the last occasion.
- 12614 Q On the other occasion when it was reversed, were there the great number of men in the mine? A It was reversed when we were going in. There were the usual number of men going in.
- 12615 Q How long ago was that? A It only occurred once during the last six or seven years—something more when the fire was out.
- 12616 Q There were only efforts in the mine on that occasion? A Yes.
- 12617 Q The reversal was only once in six or seven years? A Yes.
- 12618 Q Now, with regard to this check-reception. You know that the object of going into the mine with your colleague was to check the safety of the mine with regard to the ventilation and refuse other matters? A Yes.
- 12619 Q Do you consider that you did check it? A To the best of our ability we did.
- 12620 Q You have passed an examination lately as underground manager? A Yes.
- 12621 Q You have got a second class certificate? A Yes.
- 12622 Q You have read a little. A Yes.
- 12623 Q You have learned to lantern? A Yes.
- 12624 Q Were you under Mr. May? A Yes. I have got my certificate as underground manager, and I have also got lantern certificate.
- 12625 Q With that knowledge, do you consider that your mind and your report as to your inspection was made a check on the safety of that mine? A I think it tended to that direction.
- 12626 Q You admit that you did not go into about a third of the mine? A Yes.
- 12627 Q And, with regard to a number that you went into it was with open lights, after they had been tested by the deputy? A Yes, but I tested those when we got there with a safety-lamp.
- 12628 Q You say that you went there after you had gone in with naked lights? A Yes.
- 12629 Q In what way? A We tried up to the roof where with a safety-lamp.
- 12630 Q You say that you went in with a naked light, and that you remained higher up with a safety-lamp? A Yes.
- 12631 Q How many hours were you in altogether? A We were three days altogether. We were delivered getting to work every to the mine being all.
- 12632 Q Why did you leave yourself to three days? A We did not like to give any more, owing to the expense.
- 12633 Q Expense to whom? A To the miners who paid us.
- 12634 Q Were you located in your time? A No.
- 12635 Q Did you get through the work as quickly as possible? A If we had gone over every part of the mine, it would have taken a fortnight to make a complete inspection.
- 12636 Q To check the whole thing then would have taken a fortnight? A Well, it would have taken eight or nine days. It takes us five days now to inspect the old workings.
- 12637 Q Were you satisfied with any way in your attempt to check the ventilation, or to check the presence of gas, on that occasion? A No.
- 12638 Q Were any restrictions placed on you? A No.
- 12639 Q Why did you accept the statement of Mr. Hamilton that there was no gas? A Mr. Hamilton?
- 12640 Q No, I mean Mr. Nelson. A I do not remember having accepted it.
- 12641 Q Were you not worried by him or by Mr. Rogers that there was no need for you to go into certain places? A No, we were not. If I had that I was much satisfied.
- 12642 Q Mr. Rogers told you when you went that they had not seen any gas for twelve months? A No, Mr. Lewis.
- 12643 Q Who is Mr. Lewis? A He was the underground manager.
- 12644 Q Did that lead you to reduce your inspection in any way? A It did, when we looked at the reports. We asked to look at the reports of the deputies, and we found there were no reports of gas being present.
- 12645 Q It was no inspection to check the reports of others, and you asked for the reports of other men? A We had no lamps. My colleague had a lamp, but he could not get it to work.
- 12646 Q He brought his own safety-lamp? Q Yes, but it would not work.

Witness—C. Egan, 3 February, 1905.

- 12612 Q Did you ask for a lantern at a lamp? A No, Mr. French would be able to turn a lamp if he liked. He said "I do not want to say anything, but I have seen no gas for twelve months."
- 12613 Q Having seen those reports, which read satisfactory, you tested this inspection accordingly? A Yes, I was satisfied with my own experience of having found no gas in the mine.
- 12614 Q You spoke about Morris senior's hands being burnt,—how many rebuffs were there of an earthquake being back—how many men? A I saw Morris.
- 12615 Q Did you see any other men? A Yes, and a few others, appeared to be burnt.
- 12616 Q Why? A The idea was hanging off them.
- 12617 Q Was there a lamp? A I did not examine them, but I think that they were burnt.
- 12618 Q He told this from you, that up to the time of your being appointed a deputy you had never seen a safety lamp under the influence of gas? A No, I had not.
- 12619 Q Either in service, or in undergoing an examination, or in a mine? A I have never seen the gas actually in the safety lamp.
- 12620 Q You have never seen it of your own accord, and have never been shown what the effect was on the safety lamp? A I have been told, but have never seen it.
- 12621 Q You told "I have seen lamps in the opposite way," in answer to a question by Mr. Lynam? Now, were you in the mine when the accident? A I was in with the first rescue party.
- 12622 Q You were in continuously? A Not continuously. I was in for the first day.
- 12623 Q You were in frequently within a month afterwards,—you had an opportunity of seeing the effect of the explosion? A Yes.
- 12624 Q And in how many directions did you see indications of force? A In some places in all directions.
- 12625 Q In some than in one place, you found it in all directions,—from how many centres did you see it working? A I could not say. I have seen a bore running in the same direction as another, with force running alike and out, and some with force in all directions. In the main tunnel I saw a force going out, and a contradictory force coming in.
- 12626 Q Then you saw evidence of many conflicting forces after the accident? A Yes.

Examined by Mr. Robertson.—

- 12627 Q Your experience with regard to gas seems to have been very limited? A Yes.
- 12628 Q Were you examined by the Board of Examiners as to your knowledge of gas? A Yes, I was, as to my knowledge of mining gas generally—how to detect gas, how to detect certain percentages, how to deal with them, and how to find out in what quantity I found it.
- 12629 Q You say that you have not met with gas yourself, excepting on one occasion? A I only met with it on one occasion, and in a small quantity, but I was detected it, although I had never seen gas in large quantities, and I am sure I could detect a new.
- 12630 Q You were put to an examination by Mr. Hesthick, before being appointed? A Yes, Mr. Hesthick asked me several questions, as how to examine a mine, and so on, and I told him, and he seemed satisfied.
- 12631 Q Do you think that one examination was more exhaustive than the other? A In the examination under the Coal Mines Act I went through a big examination with regard to the nature of gases.
- 12632 Q I mean as to practical knowledge? A They were something new.
- 12633 Q Then the practical questions, relating to the finding of gas, put to you by Mr. Hesthick and the Inspectors, were somewhat similar? A Yes.
- 12634 Q Do you not think that the management of a mine would be more likely to know the capabilities of a man than an examining board, the members of which have had no opportunity of watching his work in a mine? A Well, I do not know. I think both of them would have an opportunity of putting questions to you.
- 12635 Q For the purposes of duty, do you not think it is probable that the Managers, who are responsible for the mine, would have a practical knowledge of the working of a man in the mine? A Yes.
- 12636 Q I think you said it took five days to inspect the old workings? A Yes.
- 12637 Q Do you go into every accessible place in the mine? A Yes.
- 12638 Q Do you mark them? A Yes.
- 12639 Q And, when you come to a fall, do you get on top of the fall? A If it can in any way be practicable. In fact, after the explosion, I kept here in place, altogether dangerous to see whether there was any gas there. I have been two more places that I would not go into again.
- 12640 Q You are sure that it takes five days to inspect those workings? A Yes, to do them carefully. I may be a few hours short, then in all.
- 12641 Q How many hours a day do you take inspecting them—eight or ten? A About eight hours altogether. Of course, sometimes, if I want to do it all through, I could do it in four days. But sometimes there is a stopping to be looked after in the old workings, and things like that.
- 12642 Q Could you do it in two days? A No, not to examine it properly.
- 12643 Q We have the evidence of deputies who have stated that they did it in one day? A Well, I could not do it in that time. I go over every place by myself. Sometimes the men, when they come to a heading again, and take one road each, that helps them. But I go up one road and down the other, and that adds to the time.
- 12644 Q Coming in this matter of the clock inspection, I take it that you consider that you made a sufficient check as to the condition of the mine by taking some sample places? A We thought that that check would be a help.
- 12645 Q You did not think it absolutely necessary, in order to ascertain the general condition of the mine, to visit every place in it? A Well, I do not think so. We did not visit every place. I think that if there are few places inspected, and you go to the one on the rest, that will do. If there is time, you can visit them all.
- 12646 Q Having been three days inspecting the mine, you ought to have a fair idea of it? A We ought to.
- 12647 Q You had option to go where you liked? A Yes.

12046 Q It would be an advantage on a Customs House officer to say that he only looked at one or two packages in a cargo of soap to find out if there was fraud? A No.

12047 Q Do you think it necessary for a Customs House officer to examine every package in a cargo? A I have never had much to do with Customs-house officers.

12048 Q Customs House officers are there to check our heavily packed work, but they do not open every package? A I would not like to open every one, if I could not see any harm and there, I should think that would be a check.

12049 Q And if you inspected a man and tool, three days instead of five days, you think you ought to have a fair idea of that man, and whether the work was being carried out? A Yes. I have shown to Mr. Shand and witnesses there to be about some examination of the check expected. A That is, I had no such a thing. I have had no such a statement of it. I only read the short sentence on the press, but I heard from the men that the Manager had recommended it, and that we did not have safety lamps, I object to that. We did not take the safety lamp because it was out of order.

12050 Q And you were not intimidated? A I was there to do my duty, and I was not intimidated or influenced by anyone. We were there on behalf of the men, and what little I knew, I went to try and find out in honesty to myself.

12051 Q You have a special appliance for shot firing? A Yes, that was introduced not long after the explosion.

12052 Q It is in the form of a pistol? A Yes, with a fuse attached to the eye.

12053 Q Do you not think that it is a satisfactory method of firing a shot? A Yes, I like the way myself.

12054 Q And it is preferable to the wire? A I think it would be much the same, because the fuse will throw out sparks just the same.

12055 Q It does not spark unless that appliance is a cylinder? A The fuse when you see sparks.

12056 Q Is there any flame, but not sparks? A The fuse gives off sparks. The fuse I had is half-inch out of the hole when you pull the fuse together to get a light, then the fuse gives off sparks.

12057 Q Where do the sparks come from—is not the fuse entirely enclosed in a cap? A Yes.

12058 Q Is it not better than the red-hot wire? A It is better, but the wire is a pretty good method. I was not sure at the time, but I fancy sparks come out of it.

12059 Q Can you tell me the position of the 4th Right on the day of the explosion, or thereabouts,—wait a moment? A Yes, there was rather there.

12060 Q What it was? A Yes.

12061 Q If anybody says that it was dry and dusty— A That is at the mouth of the 4th Right, but there is a little gap in from the mine road, and there was some there.

12062 Q Were you on there before the explosion? A No.

12063 Q After the explosion? A I examined it afterwards with Mr. Kruger and a party.

12064 Q Did you notice some things in there? A I do not remember identifying them at the time. There was a little black-damp there, and a small quantity of going up to the gas and not releasing it was, as far as I know, that that you could get there at all.

12065 Q You cannot remember anything as to the direction of going in there? A No.

Examined by Mr. Ritchie —

12066 Q Do you remember making an examination of the 4th Right Section when you made your check yesterday? A Yes, I remember that I went there, there were two places working there.

12067 Q Did you make any observations for gas? A Yes.

12068 Q Did you find any? A No.

12069 Q Did you test for gas at the bottom of the workings? A No, we did not. There was too much — I cannot remember distinctly whether we did or not.

12070 Q I suppose that is the most likely place to find carbonic acid? A Yes.

12071 Q Mr. Bruce Shand? A Yes were going to say just now that there was too much —? A I do not know now what I was going to say. It is quite past. That is because you are asking me questions too closely.

12072 Q Mr. Ritchie? Q Did you tell us that because you were not an official your chance of passing the examination were not so good as if you had been an official? A That is what I thought. That is why I agreed to the post.

12073 Q Do you think that now, do you think that an amount of your being a deputy you have been successful? A No, I thought it would help me to gain some practical knowledge of the workings of the mine.

12074 Q Did you think that a man has not the same chance of passing successfully as an official? A I thought so. I thought that he would not have the same chance of reporting the mine, and that an official would be able to gain more knowledge.

12075 Q Which do you mean—that the influence of your being an official is sufficient to get the Manager forced to help you, or first you have an opportunity by being an official, to better prepare yourself? A I rather mean that an official would have greater opportunities of seeing practical work, although I would not say just that would not influence the manager to know that you have been an official in a mine.

12076 Q I think it would influence the manager a little, but I am not certain.

12077 Q You think that the fact of your being an official would help in influencing the Board? A Yes, if you were an official for any length of time.

12078 Q It was of the fact that you say the examination of the mine workings takes five days, do you think that the experience you made on those days—the 25th, 26th, and 27th—was at all an effective one? A Yes, it was to a certain extent.

12079 Q To a certain extent? A Yes.

12080 Q How long would it take you to examine the working place in Mount Kembla? A I cannot tell you exactly.

12081 Q If you were to do the whole of them, would it take two days? A Yes, it would—I believe it would, unless to run.

Witness—C. Riggins, 5 February, 1902.

- 12054 Q You know that every morning the whole of the working places have to be examined, by some one? A Yes.
- 12055 Q And a report has to be written, certifying that the working places are in a fit state for the men to go into—how many men are doing it now? A Two.
- 12056 Q How thick it would take eight or nine days to examine on the railway thoroughly? A To examine minutely, and to go over every yard and test it properly, it would take a week more than a week, and it takes you longer when you are working alone.
- 12057 Q On the check inspection you only look about one third? A Yes.
- 12058 Q If you did the work minutely, there would be two thirds not inspected? A Yes.
- 12059 Q This is to say, one third not examined at all, and the other two thirds examined in a slippish manner? A That is two-thirds of the working places. We never thought of the old workings; we did not do the old workings, farther than visit any yard which we passed. The old workings would have taken us a day to do.
- 12060 Q Now, which is it most necessary to examine—made workings or a working place where there are servants or are constantly travelling? A It depends on what you have in the mine.
- 12061 Q If you are sent as a Check-inspector to report, which sort do you regard as particularly necessary for you to examine—the working faces, or the waste workings? A The one has to work night to be examined on the other.
- 12062 Q Which part is danger likely to lurk in more than the other—the place where the ventilation is constantly travelling, or the place where there is no work at all going on? A We have other things to look to besides looking for gas in a mine, such as the condition of the roof and the sides.
- 12063 Q Is that other dangers are there? A We have to consider the ground, condition of the mine.
- 12064 Q We may take it that gas is a most dangerous factor in a mine, and as Check-inspectors you are going to look for it. Now, which is the most likely place to find it? A The highest places in the mine.
- 12065 Q Would you not think that the old working places would be a more likely spot in which to find gas rather than the working faces? A Not at Mount Kembla.
- 12066 Q You think you are just as likely to have gas lurking about the working faces? A Of course, you might find gas in the old workings, but, if the current was not constantly travelling, you would find gas in the newly-sunked one.
- 12067 Q I see that in your report of your check inspection you say, "We, the undersigned, have examined the air-courses and the workings, &c." What do you mean by that? A Let me see the report. I do not think the word, "do" ought to be there. I think there must be some mistake with regard to the way that word was put there. "We, the undersigned, have examined the air-courses and workings, &c." I taken that by the word "do." I think the other words in the Act of Parliament.
- 12068 Q Did you as Inspectors want that report? A I wrote the report.
- 12069 Q Did you mean your report to read that you had examined all the workings? A No, I did not mean that, and it would not include the machinery, and so on. I meant that word "do" to stand for the other words mentioned in that part of the Act.
- 12070 Q Did you examine all the air-courses? A All the air-courses.
- 12071 Q Every one of them? A All the main air-courses we did, but there are so many of them.
- 12072 Q You were examined part of them? A We were more particular in that than in anything else.
- 12073 Q Really, after all, your check inspection on that day was not an inspection of the whole of the air-courses and workings? A No, we would some of them.
- 12074 Q Taking your evidence as a guide, there would be about one-third of the work which you did not do? A Yes, examining the old workings in.
- 12075 Q The old workings were not examined? A No, with the exception of a few yards which we looked at as we passed. To go to all places like the daylight heading would have taken up a day.
- 12076 Q Can you remember what yards you did examine? A I can remember a bit of the shaft district which I was most acquainted with.
- 12077 Q Is now of what has happened, do you not think that a check inspection should be made more complete? A We had nothing to go by. We were sent to examine the mine, and we knew that those days had been taken in consequence before. You took three days power? I saw that we would not go right through it and make a minute examination in three days, and so we went where we thought that we would be most likely to find danger.
- 12078 Q What had you to guide you in making choice of places? A We went to all the rising places.
- 12079 Q How did you know the rise from the dip? A We would know where we were working up hill, but not, I know the dip right.
- 12080 Q Do you not know that you may be walking in the dip and before you get there you may get to a rise? A I know the men descend too well to do that. I know that when we get to the dip right and the dip, left we get on to the rise. I know which way the water was going.
- 12081 Q How could you tell that all the working places were safe without making an examination of them? A I think that the most likely places to be unsafe would be on the rise. There were places when we came to the rise where the dipity would go so with the light. We did not bother so much with the places in the dip.
- 12082 Q Did you go through the whole of the overlying roads? A Yes, we went through the whole of the travelling roads.

Re-examined by Mr. Barry —

- 12114 Q Who appointed you to the post of Check-inspector? A The miners.
- 12115 Q You represented the miners there? A Yes.
- 12116 Q You were there in three instances? A Yes, in three instances.
- 12117 Q I think you and then in your evidence you say, "Look, the underground manager, and, 'I do not want to influence you, you look for yourself.' All I can say is I have not seen gas for twelve months." A He said words to that effect. He had not seen gas for twelve months.
- 12118 Q You had liberty to go where you liked, and as you liked, in the mine? A Yes.
- 12119 Q I think you said that the usual time which it took to do the check inspection was three days? A Yes, that is all we went by.

- 12750 Q How did you know it had taken three days yesterday? A The miners told us. Some had two days, I said. We will only be there two days. We will not pay us for any more.
 12751 Q You have Mr. Ritchie to be a careful, serious man? A Yes.
 12752 Q And he had previously been to the mine, and taken three days to do the work? A Yes.

Re-examined by Mr. Bruce Smith.—

- 12753 Q You expected the end of No. 1 Right heading? A I think we went to the face there.
 12754 Q You expect it now? A Yes, I was there yesterday.
 12755 Q The men go right up to the face? A I do, once a week. It is an old working. The entire ground-manager also goes, I think.
 12756 Q You only go once a week? A Yes.
 12757 Q Which of the shifts do you do? A I start at 7 in the morning and go right round the mine.
 12758 Q In the afternoon you have foremen of men are not working on a place, it does not require to be examined as often. You have a foreman now as an under-manager. I should like to know what your opinion is? Do you think that because men are not working that a place does not require to be examined? A It is according to where the place is situated.
 12759 Q Then it is one of the highest places in the mine? A Yes.
 12760 Q And, therefore, liable to gas? A Yes, but there are no men beyond that and the return. It is an old working.
 12761 Q And, as no men are working there now, you only go once a week, and you think that is enough? A It is enough for me to go.
 12762 Q Have you mentioned whether the other shafts go there? A They must go, because within the last few days men have commenced to work near there.
 12763 Q Do you know that this place was left by Mr. Morrison unexamined for many months? A I do not know that.
 12764 Q As far as you are concerned, you expect a place once a week? A Yes, once a week.
 12765 Q Mr. Underhill? Q Are any men working on the return side of this No. 1 main heading? A I do not think there are any men working now.
 12766 Q Do you consider it to be an old working? A They did not tell me what to do, I look at it to be an old working, and I go weekly, but I see the marks of the under-manager, Mr. Morrison, and others when I go there.
 12767 Q The distance is five fathoms old working, when it is the last place on the section, then when it is in the middle of the working place? A Yes.
 12768 Q At the time of the explosion, however, that was not so. It was then the first place in a section, and the air would go to a number of working places? A Yes.
 12769 Q There are no working places on the return side now? A No.
 12770 Q Then the conditions are reversed at the present moment? A Yes.

[The Commission at 2:30 p.m. adjourned until 10 o'clock the following morning.]

PROCEEDINGS, 4 FEBRUARY, 1903

[The Commission met at the Lord Appeal Court, Burlington.]

Present.—

C. E. B. MURRAY, Esq., D.C.J. (PRESIDENT)

E. A. W. ROBERTSON, Esq., COMMISSIONER | D. HITCHCOCK, Esq., COMMISSIONER.

Mr. Bruce Smith, Barrister at Law, instructed by Mr. Wood, Crown Solicitor's Office, appeared on behalf of the Crown.

Mr. A. A. Langley, Solicitor, appeared on behalf of—

- (a) the representatives of deceased miners, whose names, (written on the explosion);
- (b) the employees of the Mount Kemble Colliery Company, whose names, (written on the explosion);
- (c) the Hibernia Colliery Company, whose names, (written on the explosion).

Mr. G. J. Barry, Solicitor, appeared on behalf of the Mount Kemble Coal and Oil Company (Proprietors of the Mount Kemble Mine).

[Mr. J. Garlick, Secretary to the Commission, was present to take shorthand notes of the evidence and proceedings.]

12771 Mr. Bruce Smith: I would like to say, before Mr. Atkinson goes into the box, that, in view of the fact that this is the largest and most serious accident which has occurred since he has been the Chief Inspector of Coal mines, he proposes to make a full statement with regard to the cause, and with regard to the coal-and-vent theory, and what he thinks should be done to prevent such an accident in future. And Mr. Atkinson thinks and I think myself, that it may be of much use to the large number of people who are concerned and take part in the mining industry, if they have the matter fully set out by him, with a full knowledge of its nature and with all the latest information that has been gathered together from time to time on the subject.

12772 Mr. Atkinson: The Commission will appreciate that, if it happens that Mr. Atkinson has worked up already the history of this particular case, that also might form part of his evidence, and be a useful part. Otherwise we shall have to get the history from some other source.

12773 Mr. Bruce Smith: He has not proposed that, your Honor, but I understand he has the knowledge at his disposal, and he will do so.

12774.

11743—A. A. ATKINSON, 4 February, 1904

11743 [I want to witness his evidence that he gave immediately after the disaster, and take that as part of his evidence, without repeating it in any way, except as far as he identifies the person or witnesses who were upon a rope or place which has been prepared for the purpose (p. 56 of August).]
11744 Mr. Moore.] Very well.

Mr. A. A. ATKINSON was sworn, and examined, as under—

Examination in chief by Mr. Bruce Smith:—

11745 Q What is your name in full? A Alfred Ascher Atkinson.

11746 Q You are the Chief Inspector of Coalmines for the State of New South Wales? A Yes.

11747 Q And you have occupied that position, I think, for five years? A Since September, 1902.

11748 Q And, previous to your coming to that State and occupying that position, what was your position in New South Wales? A I was Manager of the New River Collieries in South Yorkshire.

11749 Q I think you were appointed in England to come out here and take that position? A Yes.

11750 Q How many years' experience had you had in coalmining before you accepted that position? A About twenty-five and a half years.

11751 Q So we may add that as you have had twenty-eight years' experience altogether? A Yes.

11752 Q And during the whole of that time, I think, you were engaged in one position or another in English collieries—English or Welsh collieries? A After serving my apprenticeship I went to India, and was there three years as Manager at some collieries. The rest of the time I was occupying some English position in English collieries.

11753 Q Well, now, you have told us previously here, through your evidence given at the request of Woolfington, what took place immediately after you first heard that the disaster had occurred, and during your return visit to the mine? A Yes.

11754 Q You have told us what you saw, and what you did, and what you took notes of? A Yes.

11755 Q I think that, since that, you have had one of these photographic plates marked with the greatest number of the collieries which you visited during that visit? A Yes, that is so.

11756 Q And you have had a plan and sections prepared of portion of No. 3 Right main level? A Yes, prepared by two of the officers in the Mines Department.

11757 Q Under your supervision? A Yes.

11758 Q And that describes the collieries on No. 3 Right? A From about the Red Lick to a point beyond the 4th Right.

11759 Q Now, just following the notes you have made, may you tell me what else the plan and sections show? A The indications of lines on the portion of road to which they refer.

11760 Q Do they show the positions of the bodies? A Five positions of some of the bodies.

11761 Q And you propose to use this plan and sections during your examination? A Yes.

11762 Mr. Bruce Smith.] Subject, your Honor, is being sworn to be laid up, by the two gentlemen who made it.

11763 Mr. Moore.] Yes.

11764 Mr. Bruce Smith.] Because they were at work upon it during the whole of the inquiry, acting down the main portions of the bodies as testified to by the different witnesses who gave their evidence during the inquiry.

11765 Q Now, you have visited the mine since the first series of visits? A Since the request I have visited it once in November, and twice in December.

11766 Q Did you examine anything further than what you have already stated in the request? A I think there was very little further to note, beyond what I had previously noted, in regard to holes.

11767 Q Is there any difference in the mine as regards matters? A Yes, a considerable difference in the best plan, owing to a good deal of wet weather since the explosion, the atmosphere being much heavier, had altered the condition of the mine, and, in addition, a system of venting had been adapted on some of the headings made, which made a difference in that respect also. One noticeable feature was the fungus which was to be seen on the No. 3 heading road, a size reduction of moisture.

11768 Q That was that constant appearance of a white fungus substance? A Yes, a fungus growth on some of the bodies.

11769 Q Was any of that there immediately after the disaster? Q No, I did not observe it.

11770 Q That, in your opinion, is the result of the unusual moisture, something from the gases you have named? A Yes, there had been, previous to the disaster, a long period of drought, of course, I think that induced the dry character of the mine previously.

11771 Mr. Moore.] Q If there had been that growth at the time of the explosion, the sulphur products in the air, something there was an explosion, would have practically destroyed it? A Probably they would, on the roads over which the explosion passed, decisions they would.

11772 Mr. Bruce Smith.] Q But did you find that fungus growth on other parts of the mine prior to what you went—other parts than those in which the explosion had directly operated? A I saw a little of it in some of the returns.

11773 Q Now, was there any noticeable difference in the quantity of dust in the headings made in November and December as compared with your first visit? A Yes, when the water had been put on there certainly was less dust.

11774 Q Well, now, taking the evidence which you gave at the request as part of your evidence assumed to be given now, I want to ask you which the deductions that you have made from all the evidence that has come to your mind. First, as to the cause which led to the disaster, now, you may just look at your notes as much as possible, because you have concentrated them. I think the statements you will make? A Yes, I had.

11775 Q Use that as much as you like. Now, first, as to the cause? A Well, briefly, there are the following causes—[unrepeated]

11776 Q Will you write to me, first of all, the various causes that are known to lead to explosions in mines? A Several recognized causes of ignition, leading to explosions in coal mines, are, chiefly, as follows—First, naked lights caused by persons, second, naked lights in the form of gas-fires produced by spontaneous combustion, or other fire underground, third, defects or improperly-operated safety-lamps, fourth, heading shots, either from the flame of the shot or from the flame of the fuse, fifth, escaped

smoked electrical cigarette which has been used underground for many purposes, and, it has also been stated by a large number of witnesses, especially those who, during the night, saw persons underground, but it is difficult to place any definite estimate of it.

12717. Q Now, how far back in the case, after the 19th, which was the condition of knowledge then as regards explosives and dynamite? A Well, the only dynamite agent which had been actually considered or which had been a subject for the investigation of some people was dynamite.

12718. Q And you say that from referred to before, that is a possible cause of explosion? A For reference, but from made in reports from some is not correct in the way which said that had played.

12719. Q But it was not? A It was not correctly considered by any as a factor in explosion.

12720. Q Now, you said with that report more when you come back, with the coal dust theory? A A little later on.

12721. Q Now in those days we spoke of explosion, which you have commented, which of them is unreasonable for the greater number of witnesses? A "Sailed lights" (called by persons) is my opinion, and, I think, also in the opinion of most mining experts.

12722. Q Are there any of the other causes which those explosions are attributed to frequently? I mean what to that one? A Well, many explosions, among large numbers of deaths, single explosions, have been caused by blasting.

12723. Q Now, with the view of causing the same thing, as that we may come to your opinion as to the cause of this particular explosion, tell you some any of these causes that may be left out of consideration? A The second, third, and fifth may be omitted.

12724. Q Is your opinion, then, these may be put on one side? A Yes.

12725. Q And you say that, with all your knowledge of what took place, and what you have seen, and what independent has been presented to you by your men in the mine? A Yes, that is so.

12726. Q Is your opinion, too, my understanding testimony, either as the report or as this inquiry, to lead you to think that this explosion could be brought under such a plan? A No, there has not.

12727. Q Now you have named (consider now) "Sailed lights" in the form of gas-flare, produced by spontaneous combustion or other fire underground? In your opinion, had the furnace sufficient to do with this explosion? A Well, as the explosion did not originate in the district in which the furnace is placed, and as the furnace was not in any way damaged, I do not think that the furnace had anything at all to do with the explosion.

12728. Q That can be dismissed? A It may be dismissed.

12729. Q That reduces the answer to two—sailed light and blasting where? A Yes.

12730. Q Now, speaking generally, first of all, which of those do you consider that the explosion is mainly attributable to? A Well, as sailed lights were universally used in the mine on the day of the accident, I think that they were an element in the disaster.

12731. Q And with regard to blasting, which of the two possible causes left—what opinion have you formed? A Well, as the majority of witnesses of all the headings, roads and working places, and the knowledge that no blasting shot appeared to have been fired on the headings on the day of the accident, I am of opinion that blasting was not the cause.

12732. Q Have any witnesses been brought under your notice of shots having been fired in the face workings? A Oh, yes, shots were regularly fired.

12733. Q I mean on that day? A Regularly fired.

12734. Q I mean at that time? A Oh, doubtless there would be, in fact, I have seen many of the remains of the shot holes, and a shot-rock shot, and a shot ready to fire.

12735. Q Now, when you tell the Court your reason for attributing the explosion rather to sailed lights than to shot-firing? A Well, there was no evidence of fumes from any particular place where the shots were fired which would lead me to think that the explosion was produced at any of the shots.

12736. Q Then, you are brought to last in your reasoning to the conclusion that sailed lights were the originating cause of this explosion? A The cause of ignition.

12737. Q Now, with regard to the locality in which it originated. You made some statement as to the question, did you not? A Yes, I stated that I was in doubt as between two points.

12738. Q Which were they? A One was near the face of the back heading in No. 1, and on the other side of the main place.

12739. Q Which was that? A Yes.

12740. Q Which was the other? A The other was a half of roof at the 4th Right-hand edge, being not in a favorable position of fire trap and, possibly, also having coal-dust on the 1st level and becoming ignited at the second sailed light, probably then carried by H. Morrison, near to the 3rd Left junction.

12741. Q Now, they are the two places between which you hesitated to fix the exact spot? (No answer.)

12742. Q And you take the plan and section, which you are going to produce in this Court, before you at that time? A No, it was being prepared.

12743. Q Well, I think that was prepared by Messrs. Campbell and Morris? A Yes, Mr. Campbell is the Chief Mining Supervisor now, and Mr. Morris is now in his office.

12744. Q And you stop, read its preparation, and see it from time to time as it progressed? A Yes.

12745. Q Now, after those two plans had been completed, did they meet you in getting any answer to the originating locality? A They did. They show evidently a light on the evidence of fumes on the north of road (No. 1 main level, between the 3rd Left and 4th Right open-road), which before had appeared to me unexplainable.

12746. Q Now, having the advantage of those plans, tell you tell the Court in what direction the greatest fumes appeared to have been carried? A In an edge direction.

12747. Q Edge of what, edge generally? A Edge generally over the length of road to which the plan refers.

12748. Q And, in way seen, and studied these plans, what conclusion have you come to? A Well, I am forced to the conclusion that the originating cause—(interrupted)

12749. Q The position? A Of the disaster is rather to be found in the second than in the first.

12750. Q Which is that? A That is the 4th Right.

12751. Q That is the fall of roof at the 4th Right-hand edge? Yes.

12752. Q Turning out, as you have said, an inflammable mixture of fire-damp and air, possibly also coming out from the 1st level, and becoming ignited at the second sailed light, probably that carried by Morrison near to the 4th Left junction? A Yes.

12753

FINNEY, & ALLEN, EXHIBITS, 1918.

12418 Q Did any difficulty present itself in regard to the mechanism at which you have now arrived?
A Yes. With reference to the doors which had been opened on two of the stoppages between the main level and the back landing, on the side rails of the 4th Right rope road.

12419 Mr. Robertson: Mr. Finney, do you mean a difficulty in stopping the second story?
12420 Mr. Bruce Smith: Yes. However, that it was not absolutely clear, there were difficulties which presented themselves in regard to that. Well I got him to repeat that?

12421 Mr. Robertson: Yes.

12422 Mr. Bruce Smith: Q Did repeat that, please? A A difficulty presented itself in connection with the doors which had been opened on two of the stoppages between the No. 1 main level and the back landing on the side rails of the 4th Right rope road.

12423 Q In what direction? A They were forced on to the No. 1 main level from the back landing.

12424 Q And was that direction contradictory of other doors in the same direction? A It was.

12425 Q In the same vicinity? A Yes.

12426 Q How do you account now for that apparent contradiction? How do you reconcile them apparent contradictions? A Well, assuming that opposite took place near to the 4th Left road end, in connection, the explosion would reduce them from that point in all directions. They came from the 4th Left, the two stoppages referred to are respectively about 100 and 150 yards.

12427 Mr. Finney: Q From the starting point? A From the starting point.

12428 Mr. Robertson: Q From the 4th Left? A From near the 4th Left.

12429 Q Do you mean the stoppage rails of the 4th Right? A Yes.

12430 Q That is more than 100 yards? A 100 and 150 yards respectively. I measured it on the plan.

12431 Mr. Finney: Q The measurement was 100 yards, and the other about 150? A Yes.

12432 Mr. Robertson: Q I think you will find it more than that? A I think that is about right.

Mr. Robertson: [referring to plan again]

12433 Mr. Bruce Smith: Q The right just now suppose that across and complete at? A Going away from the 4th Left, these stoppages are apparently distant about 100 and 150 yards; and the doors opened on them in the first place, in passing them towards the fire, was evidently sufficient to cause them via the back landing, but the passing of one of the doors which would provide the focus of the explosion, which was carried along probably by means of coal dust, excited by a small percentage of dynamite in the fire, would cause an increase in the force of the explosion, and then, passing down the back landing, was then sufficient to account for (first) the stoppages mentioned being blown on to the main level, and (second) the building shoving at either side of the door in the back landing, on the side rails of the 4th Right rope road, being blown in the direction of the 4th Right.

12434 Mr. Finney: Q And that, you think, would be the very first destructive action in that direction? A I think so.

12435 Q Of course, the whole thing would be nearly instantaneous, but you say you will account for that as the very first destructive action in that direction? A In that particular part.

12436 Mr. Robertson: Q May I now interrupt you moment. Would not that door in the 4th right rail be blown to the east, in the first instance, by the force coming along the main tunnel? A Yes, but I think we are not on the same door. The door that I refer to now is the door in the back landing.

12437 Mr. Robertson: Yes, but I think you referred to two doors.

12438 Mr. Finney: Q You have only referred to one door, so far? A I think I have only referred to one door. As a matter of fact, the building shoves at the side of the door in which you refer more blows to the west. I have not mentioned it yet.

12439 Mr. Robertson: Q You have only referred to the door in the back landing? A I had only referred to the door in the back landing.

12440 Mr. Bruce Smith: Q Now, the action of these forces on these two stoppages, and on the door which you have mentioned, were, I think, a difficulty, now they not? A Yes, they were.

12441 Mr. Finney: Q This would be instantaneously preceding what you are going to tell as now followed? I understand, this action? A I do not know exactly what your Honor means.

12442 Q What you have told as now, according to your theory, is the first instance of action preceding the great explosion which followed instantaneously as it is understood? A I could not separate what took place, your Honor. I think it was all one great explosion.

12443 Q Not by any appreciable lapse of time? A Not by any appreciable lapse of time. I think it was altogether accidental, and really one large explosion.

12444 Q Well, there is such a thing as an almost imperceptible duration of an explosion, and almost imperceptible sequence of action? A No doubt that is so.

12445 Mr. Bruce Smith: Q I understand, Mr. Allen, that, although you recognize that what you call one great explosion may have been the action of a series of forces, you cannot separate them? A Quite so, separated by such small intervals of time that it is impossible to — [interrupted]

12446 Q So that, if you wanted to, you could not plot them separately? A No.

12447 Q Well, that is your explanation of the difficulties which presented themselves to you? A That is the only explanation I can offer, and I think it is a reasonable one.

12448 Q Well, is there anything further you would like to say with regard to that explosion of the 4th Right? A Well, I might say that here days after the explosion a considerable quantity of fire-damp was found in the face of these workings, No. 1 main level.

12449 Q The measurements indicating the quantity were given to the Engineer? A Yes.

12450 Q Do you remember, on any part of your evidence further on, what that quantity was? A, in answer to Mr. Leavitt, I think it was.

12451 Q You have the other measurements, but you did not say what it was? A The gas was found in a pocket 4 or 5 yards on the surface side of the last air-throw near the door. That would give a distance of about 50 yards from the fire.

12452 Q Something greater, or it would be about the same, measurement of the gas which you found in that part of the mine? A Well, assuming that the gas was also in the back part place, and in the air-throw between them — [interrupted]

12453 Q Which is probable, I take it? A, I think that there would be some thousands of feet of an inflammable mixture.

12454 Q And that assumption which you have mentioned is probable? A I think so.

12545 Q Because the nut through was toward the point at which you dismounted the gas? A That is so, yes.

12546 Mr. Edwards | Q What do you mean by "inflammable mixture,"—what percentage, roughly? A Well, where we tried the gas, which went at the edge of this quantity, it would explode in the safety lamp.

12547 Q Is the ordinary safety-lamp? A In the ordinary safety lamp. Of course, beyond that, it is possible that it might not be explosive, if the mixture of the lamp and air was such as to prevent that being so.

12548 Mr. Bruce Smith | A But the nature of the evidence was that the percentage was sufficient from the gas at which you detected it up to the first? A Well, you would naturally have moved on towards the center end, and then first lamp, and more explosion towards the first, which would have some effect on showing the explosibility of the mixture at the two points.

12549 Q And, as the entire edge of the mine of gas which you found some beyond the nut-through, you assumed that it had filled the air through and the next heading? A We saw and that, yes.

12550 Q That is a reasonable assumption, too? A Yes I think so.

12551 Q Well, what bearing has the presence of that gas upon your theory as to the cause? A I think that it would, except the explosion, and account for the stoppage being blown on to the No. 1 Main Road.

12552 Q That would account the explosion? A The explosion of the first lamp.

12553 Q The explosion of the first lamp? A At that point?

12554 Q You are assuming then, I think, that there had been an accumulation up to the time of the accident? A I would not say that. But I think that, as gas was going off, as present, four days after this explosion, there might be, and probably would be a small percentage of first lamp in the air.

12555 Q At that point? A At that point where you would assume — [Interposed.]

12556 Q At the time of the explosion? A That is so, yes.

12557 Q I take it that, finding that quantity three days after the explosion, you inferred that there must have been an accumulation at the time of the explosion; and that that proved the explosion in facting down the No. 1 heading? A Well, I think it is strong presumptive evidence that there would be a certain percentage of gas in the air.

12558 Q I think the Coast Mine, but I may repeat it here, that that is the highest part of the mine? A One of the highest parts.

12559 Q And there is a considerable run in it? A A run of 30 or 35 feet, I think, from the 5th Right.

12560 Q It is, then, a very inflammable place for the accumulation of gas? A I think so.

12561 Q Now, have you anything to say in fact in support of your opinion that the fall in the 35-acre goaf was the real cause of the explosion? A Well, if the explosion occurred, as I have suggested, near the 5th Left, which is a mine intake screen, and therefore, under normal conditions, not likely to contain an inflammable mixture of air and first lamp, it is necessary to look elsewhere for such inflammable mixture, and, in further support of my opinion that the fall in the 35-acre goaf was the explosive force of the explosion, the following facts are important — [Interposed.]

12562 Q With you mean these facts? A The 4th Right picture at the edge of the 35-acre goaf had been stopped right at some days prior to the explosion.

12563 Q That I think you get from Mr. Brown's evidence? A That is related to us Mr. Brown's evidence on page 30, line 23, *Examination of Legend*.

12564 Q Yes, assuming that to be true? A And, by the condition of the staves at the goaf edge, as seen by us several times after the date of the explosion, a bark were clean and not blackened by red dirt, it was evident that the fall had not altogether finished prior to the explosion, or at the time of the explosion, otherwise they would have been blackened by red dirt blown about by the explosion.

12565 Q Well, in connection with that opinion, I think you would be quite in the Coast's passage from a back by a number of years I think, on "Explosion in Coal Mines" — A Yes.

12566 Q On page 55? A Page 55.

12567 Q To have met the facts, but, but you have the interest? A Yes.

12568 Mr. Brown | Q What is the title of the book? A "Explosions in Coal Mines."

12569 Mr. Edwards | Q By whom? A By W. N. and J. R. Atkinson.

12570 Mr. Bruce Smith | Q Now, will you just read the extract which you wish to mention, or will I take it off your shoulders, I will read it.

12571 Q Yes, I will read it.

12572 Q Now, does the condition of these of the different degrees of charcoal, help you in explaining this explosion? A Yes, the more which I saw at the edge of the 4th Right goaf was clean, and may therefore be cleared under the best condition which is maintained in the operation.

12573 Q And what condition there that had you in? A Well, it was a fact the fall had evidently not finished when the explosion took place.

12574 Q Even with the explosion itself? A Even with the explosion itself.

12575 Q Is there any evidence which Mr. Brown's gas which been upon that conclusion? A He mentions that a fall was responsible for a week before the explosion.

12576 Q Well, what would you say with that knowledge—I think there is some deduction you make from these signs? A Of course, it is quite possible, from these signs, that the fall had not even begun until after the explosion, in which case, of course, it would have no connection with, except possibly as a result of the explosion.

12577 Q Supposing that to be the case, which would you consider to be the cause which some of the witnesses mention having been? At the time that the fall was occurring, upon the 5th, supposing the fall had not taken place until after the explosion? A Well, I should say that it would be the more caused by the explosion itself. I do not think it is probable that the fall which took place could have been heard up to within in the position in which they were at the time.

12978. Q You are referring to some of the evidence which was given by men who were a long way from the spot at the time they heard a noise? —

12979. Mr. Moore: Q You do not think it possible? A I do not think it possible.

12980. Mr. Moore: Q Now, assuming that this fall was the indirect cause of the explosion, what would have occurred? A Well, it would prevent a certain of our possibly caused with fire going through the machine and, and so on to the No. 1 Main Road, and, at that point, whatever force it had, it would split in the machine and go in two directions. A portion of it would go where towards the 4th Light, and at that point was the secreted light; to the 4th Light, and it would probably be caused by the force, the light.

12981. Q The naked light? A The naked light. From that point, as I have said before, the explosion would radiate in all directions, and it would be over the 4th Light, which, in my opinion, and explosion some satisfactory device was in that region.

12982. Q Is that right, the 4th would be the first source of force, and the explosion from the naked light would be the second one, producing satisfactory results? A Yes.

12983. Q Now, if the explosion had been started in the back heading, from your knowledge of the condition of things what would have been the result? A Well, the only naked light there was carried in the two Main Roads.

12984. Mr. Moore: Q The you refer Mr. Brown Smith, to the back heading at the head?

12985. Mr. Moore: Q Yes, at the end of No. 1.

12986. Q That is where you refer to? A Yes.

12987. Q Now, if the explosion had been originated in the back heading, what do you say about that? A The only naked light was carried in the two Main Roads, whose working place are about 150 yards from the face of the back heading, and there were found at a point about 100 yards from the face.

12988. Q So that these ladies were found between their working place and the face of the back heading?

12989. A That was so.

12990. Q Is there anything further bearing on that? A Well, there was an evidence of a shot being fired in Moore's place immediately before, or at the time of, the explosion.

12991. Q What was the last place mentioned? Was not Moore the first? A On that corner of the first place mentioned was that of the two Main Roads, and the air, therefore, under normal conditions, was not likely to contain an inflammable mixture of fire-damp in that heading.

12992. Q You know that the two men headings had been attending to for some months? A That was gathered from the evidence given at the inquest by Mr. Rogers.

12993. Q I believe that the men were not had down, were they? A No, but inspection afterwards showed that the men were had been taken out.

12994. Q Could you account for Moore and men going up there? A Well, it is difficult to account for their going there prior to the explosion. I cannot see any sufficient reason to take them up into that place.

12995. Q And what conclusion do you draw from these bodies being found out of their own heading, and up towards the main and unconnected place? A Well, I think it is more likely that after the explosion they were trying to get away from it, and, although that was a dangerous spot to be in the mine, yet cannot do any indication of the extent of such under these conditions. Doubtless they would be in a confined state of mind.

12996. Q Is that important in raising you to learn to the cause of the explosion being the down No. 1, rather than up at the end? What is the significance of their position? A Well, I think that they were getting away from the explosion whether it had occurred, and I cannot offer any sufficient reason to take them up there before it had occurred, and we have very other reasons which men have evidently been travelling towards the face in order to get away from the after-damp—in other parts of the pit we have evidence of that—I think that they were doing the same.

12997. Q Does their going up in this direction to get away from the explosion mean you are looking the cause of it? A No, I cannot say that it does.

12998. Q That the only explosion you can draw from their position is that they were seeking to get away from the effects of the explosion? A That is my opinion.

12999. Q But their going there does not put it in the location of the source? A No.

13000. Mr. Sullivan: Q It seems you, though, to narrow it down to the theory? A Well, I rely more on the indications of force.

13001. Q But does it not point out to the fact that the first theory, that as to the explosion being in the back heading? A Well, assuming as I do, that they were seeking to get away from it, in that respect it will assist in reducing it.

13002. Mr. Moore: Q That is what I suggested.

13003. Q Quite right, how your statement, I want to put the question to you which seems to me; if the combination of gas up in the back heading, where you found it had occurred led on the explosion, and the explosion had, in consequence, happened, then, you actually would not expect to find the Moore and men in that place, and up towards the back heading? A Well, there would remain the second theory on reasoning for that being left their working place and going into a place which had been standing for some time, and in which there was nothing that I saw that they could expect to help them in their work in any way.

13004. Q Well, then, knowing all these facts which you have mentioned to me, you come to the conclusion that the explosion was caused—put it in your own way? A Well, indirectly, by the fall at the 4th Light must have.

13005. Q Is the fall of the roof? A Yes.

13006. Q At the spot close to the 4th Light pillar? A It is right pillar.

13007. Q And you come to the conclusion that the fall was not completed by the explosion? A That is my opinion.

13008. Q Now, what satisfaction are you able to put before the Court as to the presence of gas in the Moore and men, apart from the evidence which has been presented to it, and which was presented before the Coroner and Jury at the inquest? A An official report of 1882, when was managed the records of the Department, referring to no accident to a man named Gallagher by burning with gas in one of the levels of the Colliery.

13009. (The correspondence was produced, and put in as Exhibit No. 15. It was copied in the Appendix.)

12911. Mr. Adams: [Q] The official report was in 1897? A Yes.

12912. Q. That is before the Commission then? A Yes.

12913. Q. And, in addition to that, you were going to mention something? A Mr. Hamilton, who was the Manager of the Mount Kemble Colliery, gave evidence before the Coal Mines Commission which sat in connection with the anticipated Coal Mines Regulation Bill in 1902, and in his evidence are certain particulars with reference to the appearance of gas.

12914. Mr. Adams: [Q] I will just read those—

"1891. Q. Do you recollect in a distinct manner some time ago at Mount Kemble, where you were

approaching some work—as explosion? A Yes.

"1892. Q. Were you Manager at the time? A Yes.

"1893. Q. How did that occur? A It arose from a working coming on an old working, which had been out of use for several years, in which there was a small accumulation of gas. One man heated through, and, instead of going out and reporting the occurrence to the foreman, he went into his neighbor's heading and the two of them proceeded to the face where they had gone through, and dynamited matters. The gas came through the hole and exploded, burning them two men to some extent.

"1894. President [Q] Was anyone killed? A No.

"1895. Mr. Carey [Q] Did you have an escape at the time? A No, no here.

"1896. Q. Did you know who were approaching those workings? A Yes.

"1897. Q. Do you think there should be kept in reference to approaching old workings? A When there is supposed to be any danger, yes.

"1898. Q. Could you know what danger there would be there? A. We had assembly grounds to suppose there was no danger.

"1899. Q. Was your judgment mistaken in that case? A Yes, as knowledge. In connection with that particular accident my had taken very special precautions to eliminate any danger, as we thought, and, having done so, we thought the bore was not necessary.

"1900. Q. How do you regulate the mine? A By furnace.

"1901. Q. Is your mine here well ventilated? A Yes, very well.

"1902. Q. Have you had any complaints from the men at any time? A We never have had any complaints that I can recollect.

"1903. Q. Has the Inspector ever complained? A No.

"1904. Q. Does the mine give off any fire damp? A Very rarely, in cracks.

"1905. Q. It does give off a little? A Yes, from fissures—rarely.

"1906. Q. It either goes it off, or doesn't give it off? A It gives it off rarely.

"1907. Q. Is that action of the mine at that? A All mine."

12916. Q. That is the evidence in 1897? A Yes.

12917. Q. Well, has the Department received any complaint in reference to want of ventilation, or the presence of fire-damp, since you arrived in 1902? A No—that is, in reference to the Mount Kemble Colliery.

12918. Q. It seems in regard to the Mount Kemble Colliery. To those records of 1892, and the statement made by Mr. Hamilton, in 1894, are the only official knowledge which you have of the presence of gas in Mount Kemble? A Yes.

12919. Q. Have you any system by which your Inspector report to you the names of collieries in which fire-damp is discovered? A During the past few years, at my request, the Inspector has commenced to use the names of the collieries in which fire damp has been discovered and reported under General Rule 4, and it has been as good as necessary those in the Annual Report for the information of the public and Mount Kemble Colliery has never been included.

12920. Q. For the reason that, beyond those two instances, you have never had any official knowledge of it? A That is so.

12921. Q. Or any knowledge at all? A Yes.

12922. Q. You remember that Quana, Black, and Brynhaed, and some that does, a number of other mines, have given evidence of having found gas from time to time? A Yes, I have.

12923. Q. Did you ever, with the Inspector, or with the Inquiry, hear of any of those instances? A No, I did not.

12924. Q. And there has not come to your knowledge in any way until those two inquiries? A No.

12925. Q. Now, if those instances that have been put before the County Court, and the Court, and been brought to your knowledge, what could have been done, and what probably would have been done? A I think it would have given me an opportunity, and the Inspector of the district, to thoroughly investigate such matters, and the Department would probably have taken some action, if possible, to effect the introduction of safety-lamps, and so have created such a calamity as has happened.

12926. Q. And you want to state that, if instead of bringing this knowledge to themselves, the miners had brought this directly or indirectly under your notice, this disaster might have been prevented? A I think so, but there appears to be a line on the part of the miners that the officers will change their names, but I may say that every care is taken to avoid that.

12927. Q. By the Department? A Although on some occasions the particular complaint is of such a character that it is almost impossible to investigate it, even without mentioning the mine's name, in such a way as not to direct the attention of the management to it.

12928. Q. And if you receive information in regard to the presence of gas in any mine, although it may come to you anonymously, you act upon it? A Yes, in the same way as though it was a signed document.

12929. Q. I may take it generally from you again, that, since your arrival in September, 1902, and prior to the explosion, you had another coal fire damp in Mount Kemble, one had no pressure has reported to you, either by the Inspector or the colliery officials, or the workmen? A That is so.

12930. Q. Or anonymously? A Or anonymously.

12931. Q. Now, I want you to explain to the Court something with regard to coal dust explosions. Will you just mention to the Court the first reference to coal dust, as an element of danger to the coal-mining industry? This is just a short history of the coal-dust theory? A Yes. The first reference which I have been able to obtain was in the Rev. J. Hodgson, in describing the Poling Colliery Explosion in

Town—A. A. Johnson, 4 February, 1905.

1912. And Mr. John Buddie, an eminent mining engineer of his time, referred to it after the Walsend (England) Colliery explosion in 1830. Then came Lyell and Fensholt's report in 1841 on the Harrow explosion.

12201 Q I think you consider an extract from that report of Lyell and Fensholt's would be useful to the Commission? Those are Lyell and Fensholt, the well-known geologists? A Yes. They were appointed by the Government to make an investigation, and I thought an extract would be of interest to the Commission.

12202 Mr. Brown Smith? I will read it—

In considering the extent of the fire for the moment of the explosion, it is not to be supposed that the dump is its only limit, the coal dust swept by the rush of wind and flames from the fire, and outwards at the workings would certainly take for and burn, it then with respect to the fire as the ground to support its combustion, and we found the dust adhering to the face of the surface, and the coal dust in the dump, in the air, in the air towards the explosion, spreading gradually to a certain extent in all directions the place of origin. This deposit was in some parts half an inch, and in others almost an inch thick. It adhered together in a dense, solid state. When examined with the glass, it presented the hard, round form of hard coal-dust, and when examined chemically, and compared with the coal dust obtained in practice, no formal deposit of the greater part of the lump, and in some cases equally dense as it. There is every reason to believe that much coal dust was swept from the dump in the way of the dust by the flame of the fire-dump which swept out except it along, and much of the carbon of the dust was swept out only for west of it.

12203 Q What was the date of the Harrow explosion, do you remember? A 1841.

12204 Q I think, just in parenthesis, that Mr. Shaggle, the Government Analyst, has, in making some experiments? A Yes, he has some samples of coal dust, or rather dust, taken from the face of the back breaking, and also a sample of the coal from the same shaft is that society.

12205 Q And, bearing upon this extract from Lyell and Fensholt, in which they speak of certain coal-dust, when examined chemically, being found to be deprived of the greater part of the lump, then analysis of Mr. Buddie's may throw some light upon the question, of doubtful at all, whether there was any dust of fine in the mine? A Yes, no doubt it will. He will be able to say what percentage of the volatile parts of the coal have been driven out.

12206 Mr. Johnson? We have had the reports on the coal-dust. I was wondering if it would be of any advantage to Mr. Johnson to be had it now?

12207 Mr. Johnson? Mr. Shaggle wants to compare the analysis of the dust with the analysis of the coal itself, so that is why a sample of the coal was taken and sent to him. We have received the analysis of the dust, but not that of the coal.

12208 Witness? With further reference to this matter, I might say that, about the time of the request, I had samples collected by Mr. Watson, and a report made by Mr. Shaggle, the Analyst in the Mine Department—several samples of dust collected on the No. 1 shaft, and, if the Commission think that it will assist them in any way, Mr. Shaggle is prepared to give results on.

12209 Mr. Johnson? Q Yes, we have some samples from No. 1?

12210 Q Not analyzed? A Not analyzed.

12211 Mr. Brown Smith? Q That is quite apart from the samples headed to Mr. Buddie? A Yes.

12212 [By direction of the Commission a letter to the Government Analyst, dated 29th December, 1905, asking him to test two samples of coal-dust, and his report thereon, was put on and marked Exhibit No. 17.]

12213 Mr. Brown Smith? Q Now, going on with your history of this coal dust theory, I think it is possible something was done some years ago? A Reference to the evidence of coal dust on colliery explosions was made in a report, dated 1865 and 1861, concerning an explosion at Burnage Colliery.

12214 Q Where is that? A I think it is in the north of France. They state that the coal-dust aggravated the effects of the inflammation of the gas.

12215 Q And I think reference was made later than that by French writers? A Yes, in 1868 and later in several reports on colliery explosions.

12216 Q Now, apart from the three references you have given to the Hon. Hodgson, Buddie, and Lyell and Fensholt, are there any notable references to coal dust as an element of explosion prior to 1860? A Well, very little has been said up to that time. In that year the Burnage Colliery explosion took place, and by Frederick Abel was depicted by the Government to make tests in order to see when coal dust had taken.

12217 Q Now, I understand that, from 1860, the coal-dust question has occupied a great deal of attention, more for Frederick Abel dealt with it in West's explosion? A It has—yes.

12218 Q You might mention other sources of information? A Well, Professor Galloway, and several of the inspectors, have taken a leading part in making known the dangers of coal-dust. Inspectors of Mining Regulations have experimented very largely, and so have a great deal of literature on the subject more than that time.

12219 Q Have experiments taken place since that time—1860—notwithstanding? A They have, notwithstanding.

12220 Q Many? A Yes.

12221 Q Now, can you tell me the exact first case in which coal-dust was referred to in any finding? A That was in the verdict of the Usworth explosion.

12222 Q Usworth Colliery is in the county of Durham? A Yes. The explosion was in 1865. The verdict of the jury was to the effect that the explosion was caused by the firing of a shot—possibly coal-dust.

12223 Q Now, what is the report on that case known as? A Well, now that time came on second someone has given similar verdicts pointed to coal-dust, and about my gas, as the report. That was the Court's explosion in 1864, which occurred in a colliery which had been worked for about 120 years, and in which fire-damp had never been seen, so were they able to direct it after the explosion by the most careful tests.

12224 Q Well, what explosion did that lead to among experts? A The cause of that explosion was the firing of a shot on a bridgehead getting coal-dust, and it had the effect of greatly strengthening the theories on the coal dust question.

12225 Q To what effect? Q That they might have a explosion of coal dust entirely without any gas.

12226 Q What was the first, however, upon which the Legislature in England dealt with the question? A The Coal Mines Act of 1867 is the first time at which coal-dust is referred to in any Coal Mines Act.

- 12265 Q And what provision was included in that Act bearing upon the possibility of explosion of coal-dust? A General Rule 12 in our Act here is the same as that which was in the 1867 Imperial Act.
- 12267 Q What did that deal with? A Bearing not only—
- 12268 Q I think you have tabulated it—the nature and description of the explosion permitted? A That was the latter Bill.
- 12269 Q Then, in 1876 something further was done? A In 1876 a short Amending Bill was passed which gave the Home Secretary certain powers.
- 12270 Q What were those powers, under power to propose new special rules? A Yes, it gave the Home Secretary power to propose new special rules with respect to the following—(a) The nature and description of the lights or lamps to be used in the mine, and the custody and the mode of using and transmitting them.
- 12271 Q There is no such power in our Act, is there? A No.
- 12272 Q No such power is explicitly corresponding with the Home Secretary to make rules determining those things? A No. Of course the Department can propose special rules so long as they do not infringe upon the present Act.
- 12273 Q I understood that the power of making rules given in our Act is the same as that which was contained in the 1867 English Act? A That is so, yes.
- 12274 Q But the 1876 English Act gave the Home Secretary to make rules such as there is no power to make here? A That is so.
- 12275 Q And the first of these [a] to determine the nature and description of the lights or lamps to be used in the mine, and the custody and the mode of using them? A Yes.
- 12276 Q What is the second heading under which he has the power to make rules? A (b) The description of explosives to be used in the mine, the mode of using and storing such explosives, and of making and electrician bulbs, and the times at which, and the manner in which, stations to be used in the mine.
- 12277 Q Has the Minister the power to make rules here in that effect under our Act? A Well, the only provision is contained in General Rule 17, with reference to equipment.
- 12278 Q Well, then, the third? A (c) The manner, or class of mine, if any, to be permitted to remain in the mine, or any part thereof, while there are being fired, (d) the manner or different dropping of the mine, or any ways in places therein. (e) generally, the provisions to be adopted for the prevention of accidents from inflammable gas and coal dust.
- 12279 Q Well, that seems, given in 1876 is much more comprehensive, with out, than the power which the Minister has here? A It is, yes.
- 12280 Q And deals with a number of matters which at present here are left in the discretion of the management of the mine? A Yes, pretty.
- 12281 Q Now, that power to determine that safety-lamps shall be used, here largely exercised in England? A No, it has been very little exercised. Under the 1876 Act they have generally been able to get safety lamps introduced without that power.
- 12282 Q Without exercising the power under that Act? A Yet it has been exercised in one or two cases, according to the reports.
- 12283 Q I might just ask you, have whether you have endeavored in some cases to get safety-lamps used without orders? A Yes, in several instances.
- 12284 Q You have brought witnesses of cases you could in fact, and what you have desired has not been achieved? A In some cases we have ultimately been able to get them to do so.
- 12285 Q But in some cases you have not succeeded in inducing them to do so, although you have made representations? A Yes.
- 12286 Q Well, now, since the 1867 Act, have any other alterations of an important character been made with regard to blasting? A Yes, the Home Secretary has exercised his power by issuing the Explosives and Coal Mines Orders from time to time.
- 12287 Q What is the effect of those orders that have been issued? A Well, it has had the effect of absolutely prohibiting the use of gunpowder in certain cases and some other explosives.
- 12288 Q What is your own opinion as regards to the use of gunpowder in mines in which gas is found to be present—blowing with gunpowder? A Well, I think it is a great source of danger, especially in dry and dusty mines.
- 12289 Q And I might ask you this in passing, of the two possible sources of the pure hydrogen which, in your opinion, is greater, that of being struck with gunpowder or sparks or safety-lamp in order to fire a shot with gunpowder? A Well, the force from a shot of gunpowder is, on itself, one of the worst forms of kind light which you could have, and in, on itself, much more than the colored lamp flame.
- 12290 Q So that I may take the form you, that as far as the question is concerned of firing shots in presence of gunpowder, the opening of a lamp is really not as great a danger as the firing itself? A That is so.
- 12291 Q Now, what is the purpose of those rules—those orders which have been promulgated by the Home Secretary? A Well it is given under two heads, which are as follow—
- 12292 Mr. River South: I will read them.
- 12293 (1) In all coal mines in which inflammable gas is found under the previous time must be in such quantity as to be a source of danger. The use of any explosive other than a permitted explosive, or in particular, in fact, is absolutely prohibited in the case of mines in which the gas has been found.
- 12294 (2) In all coal mines which are not, in fact, but throughout the use of any explosive other than a "permitted explosive" is absolutely prohibited in all such, and in every day and daily use of the mine.
- 12295 Q I think the last is present adopted as "permitted explosives" is given in a sort of published statements? A Yes, there are a very considerable number of them.
- 12296 Q I think you will put a copy of the before the Commission? A Yes.
- 12297 Mr. River South then located as a printed copy of "The Explosives in Coal-mines Order of the 24th July, 1891" which was put in and marked Exhibit No. 15.
- 12298 As order of the 24th March, 1901 was put in and marked Exhibit No. 16.
- 12299 As order of the 30th October, 1902, was put in and marked Exhibit No. 20.
- 12300 Mr. River South: Q Now, that is what you have to say with regard to the history of coal-dust theory? A Yes.
- 12301 Q Now, will you say something to the Court about the characteristics of explosion by coal-dust? A Yes.

12694 Q. Quoting any authorities that you think will be of value to the Commission? A. Well, the theory is explained in many parts of the Chamberlain Royal Commission.

12695 Q. What we have called the Chamberlain Commission is a Commission of which Mr. Chamberlain was chairman? A. Yes, correctly called, it is the Royal Commission on Coal-dust, from 1894 to 1894.

12696 Q. Have you this book? A. I am afraid not. We can send for it.

12697 Mr. Brown Smith: I will postpone, your Honor, the reference to that until I get the book here.

12698 Mr. Brown Smith: Very well.

12699 Mr. Brown Smith: Q. Will you just say where, in your opinion, the most dangerous class of dust is found in the nature of a dust? A. Generally on the haulage roads, and on the — (Automated)

12700 Q. What part of the haulage roads? A. And on the timbers and upper parts rather than on the floor.

12701 Q. Why do you regard that as the most dangerous kind of dust? A. Well, it is the finest and the poorest. The finer dust is very often mixed with stone impurities.

12702 Q. And this, which has lodged on the sides, and the roof, and the timbers, is the lighter, finer kind, which has floated in the air and gradually accumulated on any shining surfaces? A. Yes; and it is regarded as most dangerous.

12703 Q. Well, I should say there are all the power of this dust in which any changed property? A. Yes. With constant extension of air passing over it, it is thought that it absorbs oxygen, and thereby becomes more dangerous, making it much more so in explosion.

12704 Q. Now, as to the quantity of dust that is considered sufficient to become an element of danger, I think Gallaway expresses a rather definite opinion, does he not? A. He has stated that 1 pound of dust per 100 cubic feet is an airway with a sectional area of 40 feet may be dangerous, and sufficient to carry on the explosion.

12705 Q. One pound for 100 cubic feet in an airway with a sectional area of 40 feet. I think you have made a calculation. What is that equal in per linear foot in a roadway 12 feet wide and 8 feet high?

A. About 7.2 ounces per linear foot.

12706 Q. Roughly 7 ounces per linear foot distributed right across the roadway, up the walls, and on the timbers, is sufficient to be dangerous? A. Yes.

12707 Mr. Brown Smith: 7.2 ounces per linear foot?

12708 Mr. Brown Smith: That is per linear foot of the roadway. So that, Mr. Robinson, if 1 foot of the roadway right across the roadway, and up the walls, and on the timbers, holds in the aggregate 7.2 ounces of dust, it is, in the opinion of Gallaway, a dangerous quantity. Is not very small.

12709 Witness: In another calculation it comes out to 1/16 of an inch thick.

12710 Mr. Brown Smith: Q. Average thickness on the floor is that? A. Average the knees, all round the roadway.

12711 Mr. Brown Smith: Q. Ceiling and all? A. Ceiling and all.

12712 Q. Now, I think Professor Weston, who is an authority, analyzed a sample of coal-dust from Tinseltown explosion? A. Yes, he found it to contain 3.45 per cent of carbon monoxide.

12713 Q. Now, what is the most notable characteristic of coal-dust explosions as regards the indications of flame? A. Evidence of contradictory flame is quite a common feature of coal dust explosions.

12714 Q. I think that was well described in the same Commission? A. Yes, by the Permanent Under-Secretary now, Mr. Geoffrey Lamberton.

12715 Q. That is on page 7 of what we call the Chamberlain Commission? A. Yes.

12716 [The passage referred to was read later in the day by Mr. Brown Smith. It is as follows:—

"It is Q. I do not know whether you told us, but, supposing that the dust theory were accepted, what would be the nature of the legislation which would then be necessary to provide against the danger? A. I could only point out the various proposals which have been put on the table, so to speak, for discussion; and as to stop all blasting, another to have no naked light, a third, that, if you allow blasting, all the men that are not engaged in blasting operations are to be removed from the pit, and the fourth is, that all the dust is to be removed or is to be removed. Now, you can understand what a formidable operation that is, when the four standards for mines and mines in a colliery; but, when removed or reduced in its application, not only to the dust but to the sides and the roof, it is almost an unapproachable difficulty. There you have a standard form of proposal; which is, that wherever otherwise the dust should either be removed, kept down, or removed. These intervals would operate in a more very much as separate watertight compartments on a vessel.")

12717 Q. Do you tell me of any other characteristics? A. Well, the passage of flame is very erratic in its course, there frequently being no traces of flame on roads where the explosion has passed, although nearly inflammable articles were present.

12718 Q. Well, that is referred to, I think, as "Explosion in Coal mines," on pages 28, 29, and 43? A. Yes.

The passages referred to were read later in the day by Mr. Brown Smith. They are as follow:—

"The nature of the dust is an important factor leading over long lanes, where great heat and flame have passed. It is not unusual at the working faces that on the haulage roads. It was not observed at the sixth trial of an explosion. A charged and uncharged condition of dust in the haulage roads, in the absence of mining, affords means for viewing the passage of flame.

No naked dust was observed on the main haulage roads, where there had evidently passed, and where there had been greater. At the termination of the explosion naked dust was abundant, and the flame extended back.

12719 Mr. Brown Smith: Q. Are there any particular parts of a mine in which coal-dust is found in larger quantities than in others? A. Well, generally on the haulage roads.

12720 Q. Is the quantity larger or less near the faces? A. It is, generally speaking, less near the faces.

12721 Q. Less near the faces than —? A. Do you refer to the coal dust on the naked dust?

12722 Q. The naked dust. You are speaking now of after a coal dust explosion — I mean coal-dust dust? A. I say there is generally an absence of naked dust on the haulage roads, it is not so frequently found as it is near the faces.

12723 Q. Where, I presume, it has been drawn? A. Yes. I thought in the first place you were referring to naked dust.

12724 Q. No. I was continuing with regard to the phenomena of coal-dust explosions. Can you tell me of anything Gallaway says as to the class of mines as the characteristics of mines in which coal dust explosions have taken place? A. Well, all the great explosions, carrying a large loss of life, have taken place in dry and dusty mines.

12725 Q. That is a condition Gallaway has arrived at? A. Yes.

12001. Q What all explosions causing great loss of life have taken place in dry and dusty mines? A Yes.
 12002. Mr. Bruce Smith: That is mentioned in your House, by Chalmers, in his book "Explosions on Mining," at p. 16 of the Lecture on Gallery Explosions, as follows:—

I had made a special study of the subject of explosions, both in wet mines in the West of Scotland, and in dry and dusty mines in South Wales, while acting as the secretary of the American Institute of Mining during the years 1873, 1874, and 1875, and during the same of these studies I had observed two remarkable facts, namely:—

1. That a fire-damp explosion in a wet mine acted by its shock against the cleavage or propensities of a great explosion.
 2. That of great explosions took place in dry and dusty mines.
- During the same period I had also made many experiments with fire-damp, and, in the summer of 1875, made with coal dust, and had observed in making the latter experiments at Greenwich College, on the 3rd of July, 1875, that a mixture of air and coal dust became inflammable and could be ignited at the flame of a Bunsen lamp, when a very small proportion of the dust was added to it.

12003. Q And I think that evidence on that all explosions causing great loss of life have taken place in dry and dusty mines is contained in the report of the Chamberlain Commission? A It is in—yes.
 12004. Q On page 117. A In the second report.

Enter in the log Mr. Bruce Smith read this passage, which is as follows:—

The Coal-dust Theory

We have here brought the history of the question down to the time of the appointment of the present Commission, and we proceed to describe the theory of coal-dust acting as an explosive, based on the facts and relations above stated, which have been presented to us by the witnesses competent to it.

It may be summarized as follows:—

1. The circumstances of many explosions, and especially of explosions in a very large mine, and causing a great height of the workings, seemed to fully coincide by reference to the theory of gas theory.
2. The presence of coal dust, and especially of fine dust, may be an indicator of an explosion.
3. If the dust and air is sufficiently quiescent, it will continue quiet, the effect and increase the intensity of an explosion caused by any other means.
4. Fine dust is a real explosive—so much so as to be dangerous per se—may be highly dangerous in the presence of coal-dust.

12005. Mr. Bruce Smith: Q Now, in the Chamberlain Commission report, there are particulars, and show that, of an explosion that took place in a coal-hopper? A Yes, there are. It took place at the Transvaal Colliery.

12006. Q Will you just describe that, as we have not the volume here—what was the nature of that explosion there? A Yes. The hopper or box contained the fine coal which had been crushed ready for the manufacture of coke.

12007. Q Was not it empty at the time? A The accident happened on a day Saturday, when the mine was safe, and in consequence the loading of the carts could not be completed by collecting all the fine dust off the ledges of dust from the hopper, so all for that purpose workings were sent into it, who were carrying large metal lamps, for the purpose of clearing out the box, and the dust all some of the ledgers rose the top, the lights were somewhere near the bottom of the box, and there was a thick cloud of dust in consequence of the sweeping. Whilst they were sweeping there was an indication, or explosion of the dust, as it has recently been termed, which had the effect of blowing several of the men to such extent that four of them died at the level of the accident.

12008. Q The hopper was above the surface of the ground, outside the mine? A Yes.

12009. Q And at the top of it there was openings? A There were several places where any gas would have escaped, but there were no accumulation of gas—passages through which the machinery worked, the elevator buckets.

12010. Q Through which any gas could have escaped? A Yes.

12011. Q So that there was every reason for saying that there was no gas present in the hopper to separate with the coal dust in producing this explosion? Q I think it was a very reasonable conclusion to come to.

12012. Q Now, it is right to say that, in the report of the Chamberlain Commission, although this incident was brought under the notice of the Commission they found nothing in the reference which was made about that? A Yes, they had the full knowledge of the accident when they made these conclusions.

12013. Q They came to the conclusion that coal dust, of itself, without the presence of gas, was sufficient to be the cause of an explosion? A Fired by a naked light underground.

12014. Mr. Bruce Smith: I expect that in the report, Your Honor, which is very short, any reason for saying that Chamberlain was.

12015. Mr. Bruce Smith: The finding was that it was unlikely, not impossible.

12016. Mr. Bruce Smith: Yes. When I have it here I will quote the particular passage from the report, in which they seemed to agree in the reference which was made about that.

[Laid, Mr. Bruce Smith read the passage which is quoted above.]

12017. Mr. Atkinson: I think there was a doubt as to the gas. There might have been some little gas present in spite of the open air.

12018. Mr. Bruce Smith: The statement appears as though, if the gas was, as it usually does, there was every possibility of its getting out. I have not the statement here, but I will have it when I get those books.

12019. Q Now, with regard to explosions of dust, is it not a well-known fact that explosions take place in flour mills where there is a great quantity of dust? A Yes, that has happened on several occasions.

12020. Q And is not a fact that in many cases connected these with an arrangement which prevents the dust from spreading over the whole building? A Yes I think also in certain places they prevent the use of either electric light or safety lamps in such cases.

12021. Q Well, have you any reason to suppose that there could be any gas or an inflammable mixture in a flour mill? A No, I think not.

12022. Q I am not asking you whether there is, but whether you think so, from what you know? A In my opinion, I think not.

12023. Q And I think there is reason for stating that, in some crushing, explosions have taken place? A Yes, I think there is a reference in my notes.

Revised & A. Adams, 4 February, 1903

19012 Mr. Bruce Smith: I will read it. It is an extract from page 281 of volume 6 of the Proceedings of the National Institute of Mining Engineers, being part of the Presidential Address of Mr. A. L. Stevenson for the year 1892.

The end that gentlemen have adopted, the results of all connected with Cellenose in the last few years, and there are some 150,000, which will make their results and show to what the possibility of any of our great explosions during the past few years.

The matter now comes to me that I have taken very little account of the later documents in the subject. There is, and has been, a large amount of very serious explosions having occurred especially where no gas could possibly have been present. I will mention a few cases, and to each of them I will refer. In 1890 an explosion occurred in the mine at Blackfield, a large part of the coal was loaded with the greatest and densest in the history of 18,000 was done, the explosion being killed. In 1891 an explosion occurred in the United States in some coal workings in the State of a mine, where the dust and charges were gathered in the mine. The end of the charging being the blowing off and loss of the workmen killed. In 1892, an explosion took place in a city mill in the Glasgow mining the death of two workmen. This was an explosion of the dust as it was described as "the dust".

There were no gas present in these cases and when we consider that explosions are only a rapid form of combustion, in which the flames of the particles of dust are produced, and that dust is dust, and that dust is dust, it is difficult to account for any one of these explosions. The same reason applies to that of those who, for many years, whenever a boiler explosion took place, stated that there was something about boilers we did not yet understand, and it was then stated that electricity had something to do with it. To make me only credit our equality.

19044 Q There is a further reference, in the evidence of Mr. Galloway, in the first report of the Commission on Accidents in Mines (Imperial),—on that what we call the Chamberlain Commission? A No.

19045 Q The Commission on Accidents in Mines (Imperial), 1901, page 145, questions 13041 to 13043 and questions 13047.

(Later in the day Mr. Bruce Smith read the evidence of Mr. Galloway, as follows):—

"13041 Q Are you acquainted with the experiments that have been made in America with dust and other combustible powders? A Yes. There are a great deal of them.

"13042 Q Do you think that we can rely on those experiments? A I do. I made some experiments myself, which have not yet been described, with coal dust, gas, and air. They are not completed. They are similar to the American experiments, and were probably made before those experiments. My experiments were made in August, 1878, and I think that the accounts of the American experiments were published towards the end of the same year, or in the beginning of the year following.

"13043 Q You are aware that explosions which ended in the destruction of large buildings in America, and, I believe, in Scotland also, have been ascribed to that ignition. Is that correct? A I think so.

"13044 Q Do you think that we may rely upon the conclusion that the different combustible dusts which produce such effects are violent? A Not the quantity of dust merely contained in the air.

"13045 Q I refer now to the particular cases described in America and Scotland? A After the destruction has once been begun, and the fire dust has been mixed largely with the air, then I think that the mixture would be inflammable and explosive.

"13046 Q Is the general view that I am referring to the explosion was so violent as to raise a bill, and to prevent some of the, and other heavy substances, to a very great distance. Do you think that the dust of those diffused in the atmosphere and ignited has the power to produce effects of that kind? A I have not made any experiments with the flow of dust of that kind, but, judging by the effects of coal dust under similar circumstances, I do think we can depend upon the accuracy of those reports.

"13047 Q You stated, with reference to the investigations which have been made as to the explosion that have occurred in that mine, investigations which were commenced originally by the late Professor Rankine a few years ago, that you did not consider that the ordinary dust from that mine would produce explosions resembling a very considerable distance, but I perceive the difference was only a difference in the state of division of the particles? A I do not think I explained myself sufficiently. What I meant to say was that in the atmosphere of a mill you will always find a little dust floating about. There is not sufficient dust in that atmosphere at ordinary times to produce an explosion.

19048 Q Now, Mr. Adams, you wish to speak of the precautions which are recommended to prevent, as much as possible, explosions by dust dust? A Yes.

19049 Q If you just tell me, first of all, where dust becomes dangerous underground? A When it is mixed in a cloud by means of fire, and explosion of fire-damp, or, second, by explosion of a blowing that, more particularly of gunpowder. Where fire-damp is present, the use of safety-lamps is a precautionary measure against an explosion of fire-damp, and also against the occurrence of underground fires, which are so frequently caused by the use of naked lights.

19049 Q The flame from a stick of gunpowder which you say is a great danger in the presence of coal dust, is itself a source of raising that coal dust, which it is likely to ignite? A Yes, the force of the blast is sufficient to raise a cloud of dust.

19049 Q It seems it, and then shoots itself into the air, does it? A Yes.

19050 Q Well, how, in your opinion, are the dangers from explosions by blasting due to coal dust to be most effectually prevented? A They may be probably prevented by careful working as required by General Rule 12, by careful preparation and blowing of the shot hole with a non-inflammable substance, by careful working in the vicinity of the fire-damp, by a competent person, as required by the above rule, and greater precautions may be adopted by using the same methods as in working, air, and, in addition, using a "protected" explosive, fired electrically.

19051 Q The "protected" explosives? A No, and I understand, and any flame or spark sets the air? A Well, some of them have been shown to be absolutely safe, but they are considered very much safer than blowing powder. I do not know of any that is absolutely without any signs of flame when fired under ordinary conditions.

19052 Q You heard a witness yesterday say that, even with the use of the exp. smoke was emitted? A He was referring to the fire.

19053.

The following extract from the report referred to was sent by Mr. Bruce Smith later in the day—

The method of watering by hand is very extensively in the district, and has been maintained to be satisfactory. The water being distributed by flexible pipes attached to a hose, or by leather. In some systems which would allow of the plant being thoroughly watered, but it has never presented itself to me as satisfactory. I have, however, seen it always been held that watering was done thoroughly wherever I visited. The question, naturally, upon making inspection of mines. This is no longer satisfactory ground for maintaining satisfactory, and I think of other measures and workers seen at the bottom were thoroughly equipped for the danger arising from dust, and obtained some satisfactory hints upon that a much greater supply is provided, and that some kind of hand pump is used for a purpose. It must also be borne in mind that, where there is much dust, water is not broken often in dust, and that it must be very judiciously distributed for use to be allowed.

[1894] [Reference] is also made to the question in a report by Professor Gallaway on the explosion at the Universal Colliery in 1900, page 12, and by Mr. Bruce, quoting Mr. Kilham, Inspector, in the same report, on pages 22, 23, and 24. There are many other opinions, too, in other reports. But these are the most recent.

Later in the day Mr. Bruce Smith read the portions of the report referred to by the witness. They are as under—

Extract from the Report of Professor Gallaway on the Explosion which occurred at the Universal Colliery, Glamorganshire, on 24th May, 1904.

Means of Preventing Dust from Explosions

The means for the removal of the various oils, and surface dust, at District B has been of some use in the removal of dust, but it is not sufficient to prevent dust from lodging on the timbers and on the top of coal and rock at the sides of the road. The witness is a fairly experienced man, and not founded on experience. I have, myself, seen a road where the timbers are covered by the dust, and the witness is a fairly experienced man, and not founded on experience. I have, myself, seen a road where the timbers are covered by the dust, and the witness is a fairly experienced man, and not founded on experience.

It is not sufficient to prevent dust from lodging on the timbers and on the top of coal and rock at the sides of the road. The witness is a fairly experienced man, and not founded on experience. I have, myself, seen a road where the timbers are covered by the dust, and the witness is a fairly experienced man, and not founded on experience.

1. Water being carried along the road in a bucket, provided with a pump, carried with him, the same as that of an ordinary water cart at the surface.
2. Sprays provided with a pump and nozzle fixed to vertical stand pipes 3 or 4 feet high, at distances of 10 or 20 yards apart. Each stand pipe fixed to a water pipe (not along the side of the roadway).
3. Similar sprays in which the nozzle is attached to the end of a long pipe, the water being carried in a bucket.
4. A water hose, 10 or 12 feet long, attached at one end to a short stand pipe connected to a water pipe lying along the road, and provided with a spray nozzle at the other end. These must be a stand pipe every 10 or 12 feet.
5. The removal of dust by a constantly working engine, such as the engine of the travelling fan, introduced into the roadway at a distance of 10 or 12 yards.

It has been suggested that, whether the dust is not sufficient to prevent dust from lodging on the timbers and on the top of coal and rock at the sides of the road. The witness is a fairly experienced man, and not founded on experience. I have, myself, seen a road where the timbers are covered by the dust, and the witness is a fairly experienced man, and not founded on experience.

The objection to this system is that the explosion in the road is not sufficient to prevent dust from lodging on the timbers and on the top of coal and rock at the sides of the road. The witness is a fairly experienced man, and not founded on experience. I have, myself, seen a road where the timbers are covered by the dust, and the witness is a fairly experienced man, and not founded on experience.

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Witness—A. L. Llewellyn, 4 February, 1903.

South Wales Coal-mines tested at the recognised testing station at Waulwich in England? A. Yes, but not so.

12080 Q And I think you referred from the office in charge of the Home Office Testing Station the following letter—“Experiments carried out at the Home Office Testing Station at Woolwich during the week of August and September, 1902, to ascertain whether various samples of coal-dust from collieries in New South Wales were capable of causing an explosion when raised by the firing of a charge of blasting powder.” I think the Commission have seen it.

12081 A. Yes, Sir.

12082 The letter referred to was put in at the Commission's request, and marked Exhibit Q. It will be found at page 74 of the printed report of the request.

12083 A. Yes, Sir.

12084 Q You sent home thirty-four samples of coal-dust, did you not? A. Yes, they took two shots from each sample. There would be two shots from the sample from each mine, but only one shot from each mine.

12085 Q They made two experiments with each sample? A. Yes.

12086 Q You received that report from the testing station at Woolwich, and then, in April, 1903, which is three months before this explosion, you sent that letter to all the different coal-mines, did you not? A. Yes.

12087 Q By direction of the Secretary for Mines, I have pleasure in enclosing herewith, for your information, copy of a report by the authorities at Woolwich Testing Station, England, with reference to the explosibility of various coal dusts collected in the State during last year, which were sent Home for testing purposes. You sent a copy of that report to every coal-mine Manager in New South Wales? A. To all the large collieries.

12088 Q That would, did it not, that the Mount Kembla coal-dust was, in both cases, the cause of a violent explosion? A. Yes, under the conditions under which they tested it.

12089 Q And I may put this generally, that in regarding the different degrees of explosibility of these dusts, the testing station adopted four standards—explosion, mild explosion, violent explosion, and very violent explosion? A. Yes.

12090 Q And the Mount Kembla dust showed the most highest degree of explosibility? A. Yes.

12091 Q You sent a copy of that result, as you say, to the Manager of every colliery in New South Wales? A. All the large collieries.

12092 Q Including Mount Kembla? A. Yes.

12093 Q And you added the paragraph in your letter—“From the report you will see that, under the conditions specified, in all cases was an explosion produced, the intensity only varying. Having regard, therefore, to the fact that large colliery explosions are sometimes produced by blasting, and propagated by means of coal-dust, it is necessary, in the event of blasting taking place in your colliery in dry and dusty places, that the superintendents of General Rule 13, Section 47, United Mines Regulations Act, should be strictly complied with, and the necessity of the shot thoroughly watered, as required by that rule.”? A. Yes.

12094 Q Those “Explosives in Coal mines Orders” (Exhibits 18, 19, and 20) were issued in 1900, March, 1901, and October, 1902? A. Yes, those are the most recent orders.

12095 Q Now, I think you have enumerated, in a return, the different fires which have occurred in the Southern and South-Western District collieries during 1902? A. Yes.

12096 Q As bearing upon this? A. Question of naked lights, largely.

12097 Mr. Bruce Smith then read a statement of fires in the Southern and South-Western district collieries during 1902, which was put in and marked Exhibit No. 21.

12098 Mr. Bruce Smith? Q What do you mean by “bottom” fire-damp? A. Fire-damp which issues from the floor.

12099 Q Now, if any further information is wanted on these, you can let the Commission have the reports? A. Yes.

12100 Q I think you have proposed a similar statement of the fires in the northern district collieries in 1902? A. Yes.

12101 Q I need not go through them? A. No, there are some of them which I might mention, which have no direct connection with the naked light, such, for instance, as Greta, the Earl, which was a gas fire.

12102 Q As all certain, you have summarised them here for the information of the Commission of the cause of them were right in the Northern District during 1902? A. Yes, and, I think, to be correct.

12103 A statement of fires in the Northern District collieries during 1902 was read by Mr. Bruce Smith, put in and marked Exhibit No. 22.

12104 Q You have a copy of the report of Inspector J. T. Robson on an explosion which occurred in Warrade Colliery, Glenunga, which was referred by the Commission? A. Yes.

12105 Q Where was that colliery for? A. During last month, when the Commission started to sit.

12106 Q When did it bear upon? A. Upon the probability or possibility of explosion being caused by falls of coal, independently of naked lights.

12107 Q That is the one that was referred to, I think, by Mr. Wade, was it not? A. Yes, I think it will be the same.

12108 Mr. Bruce Smith then read an extract from pages 8 and 10 of Mr. J. T. Robson's report on the South Wales district for the year 1902, which was put in and marked Exhibit No. 23, together with the corresponding instructions to its production.

12109 Mr. Bruce Smith? There was another one asked for, Inspector Robson's report on the Deep Navigation Colliery. I will read that.

12110 Mr. Bruce Smith then read an extract from Inspector J. T. Robson's report on the South Wales district for the year 1902, which was put in and marked Exhibit No. 24.

[At 1 p.m. the Commission adjourned until 2 p.m.]

ATTENDANCE.

(On commencing at 2 p.m. Mr. W. R. Pratt attended to take shorthand notes of the evidence and proceedings.)

Mr. A. A. ATKINSON, previously sworn, was further examined, as under:—

13125. Mr. Bruce Smith read a number of entries from various existing authorities, which were included in the report of the evidence given by Mr. Atkinson during the morning.

The examination of Mr. A. A. Atkinson was then continued as follows:—

13126. Mr. Bruce Smith. Q. Have you given carefully into the minutes suggestions put before the Commission by Mr. Kynge in behalf of the Marine League, and which were spoken to in the evidence of the different members of the Delegation Board? A. I have.

13127. Q. You have noted and are conversant with what is, so to the satisfaction of the certificate of Mr. Rogers as you consider that you have nothing to do with that? A. Yes.

13128. Q. Recommendations No. 1 is: "Managers, under managers, deputies, and other firms, to hold certificates of competency by examination, and to have had five years practical seafaring experience, before being eligible for their respective positions." What do you say as to that? A. Managers and under-managers now hold certificates, either of competency by examination, and various forms of actual management of a ship, prior to the passing of the Civil Marine Regulations Act in 1906 (para. 2, 4, 5, 6 and 8, of the Civil Marine Regulations Act, 1906).

13129. Q. Is the case of a man in which not more than twenty persons are employed, what is the condition? A. It is only necessary for the Manager to hold a permit from an Inspector, without holding either a certificate of competency or of service.

13130. Q. That is under section 4? A. Yes.

13131. Q. There are a number of men, are there not, in New South Wales in which small numbers of men are engaged? A. There are about fifty men, I think, in which under twenty persons are employed.

13132. Q. What have you in any way noted in the suggestion as to which managers and under managers who have certificates of service? A. Captain Managers and under managers, who have certificates of service, may have studied such an age that they might be unable to pass a theoretical examination in order to gain a certificate of competency, and on that account to take away their certificate of service, might produce very undesirable results and deprive them of their only means of making a living without effecting any corresponding advantage. In cases of some of the class of Managers holding certificates of service will want to read, and as the certificate provisions are made in section 18 of the "Civil Marine Regulations Act, 1906," whereby the certificates of Managers and under managers proved to be incompetent may be annulled.

13133. Q. Is the case of the case of the law, and under all the circumstances, what opinion do you form about the suggestion? A. I do not think that any change in the law is necessary in regard to Managers and under managers.

13134. Q. How are disputes and other firms at present settled? [Mr. answer.]

13135. Mr. Bruce Smith. Q. Are there in New South Wales any men holding these service certificates who have not actually put them into operation by becoming Managers? A. I think there are a few.

13136. Q. Would you suggest that in these cases something might be done without leading to any expense, seeing that these gentlemen have not taken advantage of their certificates? A. It would be difficult to make any distinction with regard to these men, who, although they may not be in active service, may be competent, but incompetent to pass an examination.

13137. Q. Would you suggest that some further inquiry might be made with a view to these gentlemen undergoing some further examination before they have the right to keep these certificates assigned? A. It might be necessary in the case of men who have not been doing efficient duty for a number of years.

13138. Q. It might be a little risky, under those circumstances, to trust to service certificates? A. Yes, the law during which a man might be associated with safety management might make him a little risky.

13139. Mr. Bruce Smith. Q. There might be cases in which men had been out some six months? A. There might be.

13140. Mr. Bruce Smith. Q. I mean where a service certificate has been obtained but never used?

13141. Mr. Atkinson. Q. They can get a new certificate put. I mean that persons who have assigned the person of Manager can get a service certificate by applying for it? A. I do not quite follow you.

13142. Q. A service certificate can be assigned in a person who has been a Manager within five years of the passing of the Act? A. Yes, from 1901 to 1906.

13143. Q. Suppose a man was the Manager of a ship for twelve months, four years before the passing of the act, he could not get a certificate? A. Yes, if he proves his qualifications.

13144. Mr. Bruce Smith. Q. Mr. Atkinson has put a much worse case than the one I gave. I was not thinking of a man whose a man could not possess a certificate because of past service, but of cases where men possessed service certificates immediately after the passing of the Act and have never taken advantage of them.

13145. Mr. Bruce Smith. Q. Some bill is now before Parliament dealing with this question? A. Yes.

13146. Q. Is it suggested by the Department? A. I do not know when it is assigned by.

13147. Q. Is it suggested by the Minister? A. Yes.

13148. Q. What will be the effect of it, if it is passed? A. The effect of it will be to assign Managers, who hold certificates of service, to pass examinations.

13149. Mr. Atkinson. Q. Was not that left unmentioned by Mr. Smith? A. I think it was.

13150. Mr. Bruce Smith. Q. Now, with regard to the case mentioned by Mr. Kynge in which a man, now without a certificate, may obtain it at any time on the strength of experience gained between 1901 and 1906—would that ever within the scope of the law suggested by Mr. Bruce—that a man should be refused a certificate unless he has been engaged in practical work within certain number of years? A. It is a difficult question, but that is the only reasonable way in which it can be done.

13151. Q. You do not wish to strengthen the case of men who are said by want of modern practical work to occupy positions in which the lives of so many people are at risk? A. Certainly not.

13141 Q But at the same time you do not want to see men well advanced in years, and possessed perhaps of considerable ability, deprived of the means of earning their livelihood, unless some advantage is gained?

A That is my intention.

13142 Q Now, with regard to men who occupy the positions of deputies and clerks, how do they stand at present? A They are selected by the Managers, and are supposed to be competent persons for their duties, as indicated by General Rule 4 and 15, section 47.

13143 Q Would you propose any alterations in view of the evidence given before the Commission? A Managers will naturally select the most competent men available for these positions. It may, however, sometimes happen that Managers for some reason which we do not know, may select persons who are not altogether competent, and as there are very responsible positions, and in order to test their competency by some means in addition to those adopted by the Manager, I would suggest that an oral, practical examination by the Board of Examiners now appointed under the Coal Mines Act to examine candidates for Managers and under managers, should be made.

13144 Q Such examination would, I suppose, be confined to a summary of the duties laid down in the Rules applicable to these people? A Yes.

13145 A Mr. Gibson? Would you suggest that the examination should be made for the purpose of selecting a man to whom a certificate would be sent and some other man made to know, so do you suggest that, before a man is appointed by a manager to a position of deputy or clerk, he should undergo an examination as to his qualifications? A In the event of a man being appointed, I would suggest that in addition to an examination by the Manager he should undergo a verbal examination by the Board.

13146 Q For that particular purpose? A Yes, for that particular purpose.

13147 Q When a Manager thinks of appointing a man, therefore, he would have to go to the Board to undergo an examination before he could be appointed? A That matter might be arranged by the Board acting a little more frequently. The Board might sit once or twice a year as often as it does now.

13148 A Mr. Gibson? Q How would that work in practice? A I would to appoint a deputy to-morrow, I would have to go without making an appointment until the next I sought to appoint had appeared before the Board, which might hold a meeting three months hence. Would it not be better that these men should have certificates in the same way as the Managers or under managers? A No doubt the suggestion I made at first might be workable.

13149 Q Would it not be better for a man to quickly be so certifying, and then he could be appointed after obtaining it? A It certainly would be.

13150 Q Do you see any necessity for drawing any distinction between a deputy and a foreman? A I think that these duties are so intimately connected with each other, those examinations would be sufficient, as it would be based up on the same basis.

13151 A Mr. Gibson? Q You think that a man might have an examination which would fit him for either of the posts? A Yes.

13152 Q What confidence have you come to with regard to the difficulty presented to you by Mr. Robertson, that if a Manager wishes to choose a man as deputy, he might have to wait until that man had undergone an examination. Would it not be better to have a standard oral examination, and to let anybody go up for it who is serious enough to fill such a position, and then to require Managers to choose from men who have passed the examination? A I see the difficulty, and I think it would be better to adopt the plan suggested.

13153 Q You think the work could be done by the existing Board of Examiners, without creating a new Board? A Yes.

13154 Q In connection with that certificate, what would you recommend for the granting of that down? A At present General Rule 15, section 47, is very worded, and is a very difficult for the ordinary lay mind to understand it, and I think it would be well to lay down a set of instructions for the guidance of those men.

13155 Q I ought to give you the chance of professing your evidence by saying that you are expressing your opinion and subject to the right of modification, in matters of detail after you have heard what the Managers of the mines may say with regard to the practicability of the suggestions made? A Yes.

13156 Q You are giving evidence so that the Managers may know what you are prepared to recommend as the chance of any evidence from them? A Yes.

13157 Q Recommendations No. 1 is that "Inspection should be carried out with absolute power to enter the use of safety lamps." You remember the various opinions expressed on this matter? A I do not approve of the absolute form of the recommendation.

13158 Q What do you propose? A I would propose that the Chief Inspector should have power to enforce the use of safety lamps, subject, however, to submission, as provided by the Coal Mines Regulation Act, section 31.

13159 Q Why would you make that qualification for submission instead of giving absolute right to the Chief Inspector? A I think that the other side should be heard as well. Risk means and means should be heard with reference to the proposal.

13160 Q You take it that the proposition is the Manager might be able to show that the information communicated to the Inspector was inaccurate? A They ought to be able to show that.

13161 Q And you think that it would be a fair solution of the question to allow both sides to be heard, not to let the Arbitration Court be interfered for the purpose of settling the matter? A I think that would be a fair solution of the difficulty.

13162 Q Finding the finding of the Arbitration Court what do you propose to do about it? A I think the manager should just as safety lamps.

13163 Q Do you think that the Manager ought to be required to do that? A Yes.

13164 Q Supposing your suggestion is adopted, would that not be a more favorable man with regard to the interests of the proprietors than the practice as England at the present time? I think, then, that the House Secretary has absolute power, which comes to less from information supplied to him by the Inspector to order the use of safety lamps in any mine? A That is so.

13165 Q The third recommendation is that "Violations by persons should be prohibited, and then not tolerated?" A Yes.

13173. *Mr. Shores* | *Q* I might ask whether, in case of emergency as a large mine, you would recommend that the Mines Department should be bound to supply lamps temporarily, pending supply by volunteers, even for, possibly, being charged against the Company? *A* I think no arrangement like that might be made in.

13174. *Mr. Shores* | You can that a large number of safety lamps could not be purchased within the mine. You might get fifty, but it would be impossible to get 500.

13175. *Mr. Shores* | The Department might obtain a supply of the lamps, and if they were not required by the Company they would go back to the Department. If they were required by the Company, presumably, they could be brought from the Department, and the Department could obtain more.

13176. *Mr. Shores* | I think that could be arranged for.

13177. *Mr. Shores* | I was referring to the recommendations that "Ventilation by furnace should be prohibited and fans substituted." What does you say with regard to the matter? *A* For ventilation, especially in shallow mines, it is no doubt more efficient and regular, than that by means of the furnace. When instantaneous you are known to be given off as a mine, and the ventilation is found to be unsatisfactory, and more than thirty persons are employed underground at one time, it might well be required that a fan be used.

13178. *Q* Speaking more particularly about Mount Kembla. You heard the evidence of the witness on this question, and you also have something of your own knowledge? *A* As regards Mount Kembla, where the shaft sunk is over 450 feet deep, and the quantity of air circulating is more than 50,000 cubic feet per minute, the ventilation, if properly conducted to the working places, is in my opinion sufficient to meet the present requirements of the mine, and after hearing all the evidence, I do not think the monthly factory where has been sufficiently demonstrated in policy not to recommend an immediate change to fan ventilation. Further extension and development may demand a constant ventilation power in the future.

13181. *Q* When a demand is made that fans should be substituted for furnaces, what would you propose should be done? *A* I would recommend that any such case should be brought within the scope of section 31 of the Coal Mines Act.

13182. *Q* You imagine that the change from furnace to fan may involve very large expenditure? *A* It may.

13183. *Q* And when an Inspector has come to the conclusion that a fan should be substituted for a furnace you would allow a Company to have a say in the matter and refer the matter to the Tribunal under the Act? *A* Yes.

13184. *Q* Would not that be the case now under the Act? Could not the Inspector require a mine owner to make a fan? *A* Not with reference to ventilation. That is dealt with in the first Mineral Rule.

13185. *Q* Then it does not come under the *Advisory* provisions of the Act? *A* No.

13186. *Q* You would bring the matter under the *Advisory* provisions? *A* Yes, that is my idea.

13187. *Q* So that it will rest with the Inspector, if he comes to the conclusion that the ventilation is unsatisfactory, to require the Company to "show cause" why they should not substitute a fan? *A* Yes.

13188. *Mr. Shores* | *Q* You would simply recommend that persons who have reference to matters already provided for? *A* Yes.

13189. *Q* I suppose that provision continually hampers the action of the Inspector? *A* Yes.

13190. *Mr. Shores* | I think that the words "Matters not already provided for," would be struck out and that would bring the question of both fan and safety lamps.

13191. *Mr. Shores* | Or anything else. Why should the action of the Inspector be hampered in this manner?

13192. *Mr. Shores* | Mr. Wood informs me that the present wording is the result of me simply copying the English Act of Parliament which has already been altered in many ways, and, therefore, these parenthetical words in the Act might be taken out.

13193. *Q* There are some special recommendations connected with the Mount Kembla case in connection with the Sydney water supply? *A* The Kembla shaft sunk is on the old ground area of the Sydney water supply.

13194. *Q* You may mention if that affects the Board in any way? *A* The Metropolitan Board of Water and Sewerage spent a money expenditure on the surface of this mine. In fact, it is understood between that Board and the Mines Department that any losses of that area shall only be provided the understanding that no mining operations are conducted from the surface.

13195. *Q* Does that power to apply to any other non-lower Mount Kembla? *A* Yes, to several on the coast.

13196. *Q* As present on building is involved on these is in the present along westward, or any sort of work on the surface? *A* No.

13197. *Q* There is simply a hole in the earth and a tunnel? *A* Yes.

13198. *Q* Where a tunnel is situated underground that a fan would be very much hindered of first up a mine, well you tell the Commission if there would be any practical obstacles, more especially if any surface power were necessary, to having the fan in that position, away from the Manager, the chief manager, and all the other working operations of the mine? *A* It would not be likely under those circumstances that a fan would be under the daily supervision of the officials in the mine because that the furnace now is.

13199. *Q* How many men would it involve for the actual working of a fan? *A* Three.

13200. *Q* Two men constantly? *A* One on each shift.

13201. *Q* So that there would be one man there only at a time, and he would be far removed from the administration of the mine, and upon him when the ventilation of the whole of the mine would depend? *A* Yes, when some other arrangements were made.

13202. *Mr. Shores* | I was just asking Mr. Fletcher whether anybody would ever dream of putting up an engine on the top of a hill, so far away from the general workings, and he says no.

13203. *Mr. Shores* | *Q* In the event of a fan you do not want that shaft as a fan? *A* The top of the shaft would be the best position in which to place a fan, having regard to the workings, and the shaft being in a central position.

13104. Q. In the case of Knolls the shaft is already there, and in a favorable place where a fan could be put. In the event of starting a new mine, would you not make arrangements in being the mine as far as the fan near to the tunnel mouth? A. You would have made that in the first working of a mine, whatever was done in the future.

13105. Mr. Brown: Is it a fan? A. I am keeping myself to Mount Knolls. A. I am only speaking of Mount Knolls as it stands at present.

13106. Q. Do you admit that if they were starting another Mount Knolls, or any other mine, it would be possible to arrange a fan so that the ventilation would be near the entrance? A. Yes.

13107. Q. And being the return air back so that the arrangements could be within the province of the General Manager? A. Yes.

13108. Mr. Brown: Q. The question is, what Mr. Brown thinks should be done in the present case, and whether it would be reasonable to put a fan on the top of a mountain to keep the present system as it is? A. The better place for a fan would certainly be at the top of the open shaft—that is, of course, assuming all conditions as they are at present.

13109. Mr. Brown: Q. And having regard to the arrangements underground? A. Yes.

13110. Mr. Brown: Q. Under any circumstances would you consider the work of attending to a fan to one man? A. No, I think it would be more reasonable to have at least two men about.

13111. Q. You do not think that the ventilation at Mount Knolls at the present time is shown to be unsatisfactory, and therefore you do not recommend any change? A. I do not think it is unsatisfactory at present. And I may say that I think the difficulty of getting fan shafts will present itself in other places on the eastward area, and if the Commission could make any suggestions or recommendations which would make the fans on this matter it would be a good thing.

13112. Mr. Brown: Q. Is it not nearly, when the fan is employed, to go in for level ventilation? A. At some of the mines, where properties extend much further back, it may be necessary for them to have more ventilation shafts further back, such as Mount Knolls has.

13113. Q. A true upshot. A. Yes. Where these mines have to go 3 or 4 miles back they will require some shaft on the eastward area.

13114. Mr. Brown: Q. And that will be quite irrespective of any return of air in the front of the mine? A. Yes, irrespective of that.

13115. Q. And you suggest that the Department of Mines should have power to deal with this matter in a way that would harmonize with the needs of the Water and Storage Board? A. Yes.

13116. Q. With regard to Recommendations No. 4 "waste workings to be absolutely sealed off and surrounded by returned airways for line of explosion, such return airways not to come in contact with the airways." What do you say with regard to that? A. The proposal to absolutely seal off waste workings, in opposition to the best principles of the best mining authorities.

13117. Q. Are there any circumstances in which you would seal off a waste working? A. Unless to seal off a fire or unexploited fire, all waste workings and good edges should be left open to return airways, the former being reinforced as far as practicable, and the edges of the latter except by a ventilating furnace. In this way serious and inflammable gases would be regularly disposed, instead of being allowed to accumulate.

13118. Mr. Brown: Q. I do not wish you to seal about sweeping the edge of the gulf by a ventilating current. I suppose you would leave the waste open to the return airways. A. What I said was that unless it was to seal off a fire, all waste workings and good edges should be left open to return airways.

13119. Q. I see, you leave the return airways? A. Yes.

13120. Q. But you provide for any special kind of air? A. No, only the return air—that is, after it has been raised the mine, but in some cases fresh air might be necessary.

13121. Mr. Brown: Q. Would it not be a disadvantage? A. The object is to carry away any carbon gases.

13122. Q. You do not propose to pass the return air through the gulf at all? A. No.

13123. Q. You suggest then that the gulf should be sealed off on the outside side? A. Yes, there should always be a sealing off between the outside and the return air. But there should not be a sealing off in such a way as, I understand, proposed by the recommendation.

13124. Mr. Brown: Q. Do you mean that no return air should pass the edges of these gulfs? A. Yes.

13125. Mr. Brown: Q. The return air would be at that stage when it would not have to go on to any men? A. Yes.

13126. Q. But it might be returning from some mine, and passing on to other men? A. If it is, it should not be allowed to go through the gulf.

13127. Q. I suppose you would not call it return air if it went on to any other men? A. No.

13128. Mr. Brown: Q. Return air is not that in these gulfs? A. Yes.

13129. Mr. Brown: Q. You mean after it has been in all the men and at the time when it is going to no more men? A. Yes.

13130. Q. You have heard witnesses speak of the way in which the waste workings have been impeded in the Knolls mine? A. Yes.

13131. Q. How ought they to be impeded? A. I think that the impaction of waste workings and good edges should be made with a locked safety lamp in all cases.

13132. Q. Would you have that a matter of discretion? A. No.

13133. Q. How does that matter stand now,—are all mines using locked safety lamps for the purpose? A. Yes.

13134. Q. Then the practice is generally adopted? A. Yes.

13135. Q. Do you think, as you saw Mount Knolls, that the 35-acre gulf was left open to the mine? A. I only saw it after the explosion. I am not sure about all the places on the north ridge of that gulf.

13136. Q. Did you not see it some months after the explosion? Was the 35-acre gulf then open to the mine? A. It was some days after, I did not see it on the November or December visit, but I quite agree with the suggestion offered in the practice of allowing a gulf to be open to an intake.

13137. Q. The 19th Recommendation, that "All places except propelling idles should have cut-throughs not more than 32 yards apart." A. I think the principle embodied in the recommendation is reasonable, especially in deep mines, because (1) it might have the effect of making the pillars too small to carry the superincumbent

- 13156 Q Can you name any mines in England in which this same special rule is observed? A There are a very large number of mines where the rule is observed.
- 13157 Q Do I understand that if there are any there is evidence in any New South Wales mine which do not show automatically. It is against the special rule? A Yes.
- 13158 Q Mine in which the rule is observed in England are among some of the largest? A I think that there was some slight modification of the rule at the Metropolitan Colliery to suit the local circumstances.
- 13159 Q Is the rule generally observed? A It has always been observed.
- 13160 Q I suppose that if the doors were to close automatically that ought not to render the miners less careful to see that they are closed and that as pieces of coal, or anything else, are allowed to keep them open? A I do not think that it would reduce the responsibility from the weakness of seeing that the doors are actually closed. In fact, where the rule has been in force persons have been prevented for not attending to it.
- 13171 Q Have? A Yes, not here.
- 13172 Q I have heard a suggestion that the rule is not in force here—is that true? A It is in force here.
- 13173 Q And in there a rule in three here under which men could be prevented for leaving such a door open? A Yes.
- 13174 Q Recommendation No. 10 is that there should be "Double doors on driven between main entries and returns, and on main headings"? A I think it is required that this should be done now—except perhaps in main headings. I know it is in many entries and returns.
- 13175 Q A special rule has been made since the Mount Kembla disaster? A Yes.
- 13176 Q Are there special rules in England regarding double doors? A Yes, in nearly all districts.
- 13177 Q What is the suggestion you spoke of? A You say the special rule is drawn in to require double doors on driven as between main entries and returns. This recommendation also requires some knowledge. I think that having double doors between main entries and returns has been used in fact in drafting the rule as conceived, but it may be necessary to carry it a little further in some cases.
- 13178 Q Do you see any objection in carrying it further? A The only objection would be that of altering the rule just after it has been passed.
- 13179 Q If there are a number of other alterations being made it could be done? A It could be done then.
- 13180 Q Would there be any difficulty in including the main headings in the provision? A You would not require double doors in the last underground mine then. You would have to drive the line somewhere, and it is difficult to say where the line should be drawn.
- 13181 Q Recommendation No. 11 is that "A weekly measurement of air should be taken in each mine and a report thereof sent to the Inspector." What is the present practice? A At present the air is measured and recorded by—(1) Management, monthly, as per General Rule 1, column 40; (2) Inspectors during the ordinary course of inspection; (3) by the chief inspectors on behalf of the workmen.
- 13182 Q Would the proposal made in the recommendation increase the safety of the mine? A No. Having regard to what I have stated, and to the fact that the proposal if put into operation would not, in my opinion, increase the safety of the workmen, whilst it would add largely and unnecessarily to the work of the management, and unduly increase the clerical work of the Inspectors, I would recommend a change in the manner indicated.
- 13183 Q Recommendation No. 12 is "An extra supply of safety lamps and their repairs to equal to one third of the number of persons employed below ground to be kept constantly in good order and ready for use." What do you say about that? A Having regard to the evidence that has been given in connection with the Kembla explosion, I would recommend that for the use of rescue parties in the event of accident, where safety lamps are not required to be used for ordinary work, there should be kept a supply equal to one fifth of the number of underground workmen. Where safety lamps are required for ordinary purposes, and where, therefore, a certain number of these lamps are used would be available in the event of accident, I would recommend that old found safety lamps be kept in reserve of ordinary requirements equal to one-tenth of the number of underground workmen.
- 13184 Q You heard the evidence of the deficiency represented at Mount Kembla with regard to obtaining lamps for the rescue of the men? A I did.
- 13185 Q And your recommendation is, in some extent, based on that? A Yes.
- 13186 Q Do you remember with regard to the accident at Kembla, what took place? A That was before my time, but I understand that a number of rescuers were lost in attempting to rescue men from the mine.
- 13187 Q Did they have safety lamps? A They would not have safety lamps but naked lights.
- 13188 Q What would probably be the cause of the accident to the rescuers? A Sometimes it is the danger of too many persons, especially inexperienced persons, rushing into a mine.
- 13189 Q You think that the happy accident is required? A I think that one should be exercised in selecting those who ought to be allowed to go in. There should not be an indiscriminate rush of men, and possibly of inexperienced men.
- 13190 Q You heard some of the witnesses say that during certain hours the whole of the safety lamps would be in use in a mine? A Yes.
- 13191 Q In that way you require a fifth and a tenth extra? A Yes.
- 13192 Q In the case of the Mount Kembla Mine it would give thirty extra lamps, on the assumption that the whole of the lamps were in use? A Yes.
- 13193 Q You think that would be quite enough? A Yes.
- 13194 Q What do you think of the material? Would you require the lamps to be kept ready trimmed, like those of the wire trolley, all ready to be lighted? A Not so long as there is a supply of oil and wicks, and as long as the lamps are otherwise ready. If the lamps were filled with oil and allowed to remain unattended for some weeks, they could not after wards be used immediately.
- 13195 Q You merely require that a supply of material should be kept on hand? Yes.

[At 4 p.m. the Commission adjourned until 10 o'clock the following morning.]

JOURNAL, 5 FEBRUARY, 1935

[The Court was met at the Lord Appeal Court, Derbyshire.]

General.

C. E. R. MURRAY, Esq., D.C.J. (PRESIDENT).

D. A. W. ROBERTSON, Esq. (COUNSELLOR) | D. RITCHIE, Esq. (COUNSELLOR)

Mr. Bruce Smith, Barrister at Law, instructed by Mr. Wood, Crown Solicitor's Office, appeared on behalf of the Crown.

Mr. A. A. Lough, Solicitor, appeared on behalf of—

- (a) the representatives of deceased miners, widows, &c. (victims of the explosion),
- (b) the employees of the Mount Kembla Colliery Company, widows, &c.; and
- (c) the New South Wales Employees' Association (the Southern Mines' Union).

Mr. G. J. Barry, Solicitor, appeared on behalf of the Mount Kembla Coal and Oil Company (Proprietors of the Mount Kembla Mine).

(Mr. J. Garlick, Secretary to the Commission, was present to take shorthand notes of the evidence and proceedings.)

Mr. A. A. ATKINSON, previously sworn, was further examined, in order—

Re-examination in chief by Mr. Bruce Smith (continued).—

13195. Q. You were just going to start Re-examination No. 13, as to the watering of the haulage roads and other places necessary. What opinion have you formed with regard to that? A. Well, I have already suggested that, where practicable, and that should be watered, but I should like to hear what the witness has to say with reference to the cause, and when I give evidence again, probably towards the end of the Commission, I shall be in a better position to submit some proposal to the Commission for their consideration.

13196. Q. I think you have gone very fully into this, in your own mind, have you not? A. Yes.

13197. Q. And I think that you have recognized the difficulty of laying down any hard and fast principle, applicable to all cases? A. Yes.

13198. Q. I will lead you this bit, I think you recognize that such mine must be treated according to its own peculiar conditions? A. Certainly, yes.

13199. Q. And I think the present meaning of your words is this—one of them is that the system of watering should be due to be brought within the province of that clause which allows the Inspector to make some additional requirement in anything that may be done by the management, and, in the event of the management not approving of that, to let it be determined by arbitrators under that provision? A. Yes, I think that would be a reasonable and reasonable course to adopt.

13200. Q. That is your present feeling in regard to it, but, after the Managers have heard that general statement of your opinion, and having got evidence, you will be prepared to lay down some more definite proposal? A. Yes.

13201. Q. Some of the mines, to your knowledge, have a practically unlimited supply of water always at hand? A. Some few, but they are decidedly in the minority.

13202. Q. And some, you know, have so little supply that they would have to bring anything required for the purpose from outside? A. That is so.

13203. Q. That is one reason why it is a little difficult to lay down any general rule which would be applicable to all mines.

13204. Q. Now, having that for the time being, and getting on to Re-examination No. 14. That is a proposal that managers should be compelled to give some personal time and attention to the management of their collieries. What do you say about that? A. Well, at present, either the manager or the under-manager is required by the Act to give daily personal supervision to the mine, but I think that in some cases, there is a tendency on the part of the manager to delegate most of the underground work to the under-manager.

13205. Q. And when a person assumes the duty of a manager under industry circumstances? A. Well, under ordinary circumstances, I think that a manager should endeavor to go underground, and at least some of the workings, either, &c., two or three times a week, and it would be advantageous if they were required to make a report at a week for the purpose of showing the general result of their investigation, and the state of the mine required.

13206. Q. You feel the more difficulty, as regards to that, in laying down any hard and fast rule, do you not? I mean, as to how much of the mine they should visit, or how often they should visit? A. Well, I do not exactly see the more difficulty as to the other question.

13207. Q. Not to the same extent, no. A. I have suggested that, generally speaking, two or three times a week they should endeavor to visit underground.

13208. Q. To be in the mine? A. To be in the mine and visit the underground workings. There might be some cases where that would not be possible. That is my general idea of what they should endeavor to do, having regard to other work and responsibilities attached to them.

13209. Q. Then you will put your proposal in regard to that in a more definite form, after you have heard the Managers' evidence? A. Yes, if it is desired to do so.

13210. Q. Re-examination No. 15 is a suggestion that statements should be placed at the bottom of the report to determine variations of heat and air pressure? A. Well, at present, a thermometer and the recorder are required to be kept above ground in a conspicuous place near to the entrance of every mine, according to General Rule 16, section 47, and, in addition, a water gauge, where a fire is in use. I cannot recommend any other instruments for the purposes suggested.

13211. Q. Regarding this minute suggestion, No. 16, what have you to say? A. The present rule of the minebooks required by General Rule No. 16, is 8 feet high, 3 feet wide, and 4 feet deep. I think that is ample size, and have heard no evidence that leads me to recommend any change.

15113 Q Now, with regard to Recommendation No 15, a proposal that the employees should be instructed regularly as to the manner of escape, what have you to say? A It is one of the possibility of explosion, fire, or inundation, and, of course, it is no doubt desirable that miners and other employees should be instructed with all the possible means out of a mine, and, as some mines, sometimes have large rooms or saloons there, both by allowing them to open in the different rooms, and by collecting the smoke by means of guide boards. I would recommend that, wherever a party of six underground workers engaged to be shown the different routes out of the mine, it should be the duty of the manager to allow them to go accompanied by a competent official, so long as this report is not made more than once in three months.

15114 Q You did not mean to limit it to once in three months for all mines? A The same we mean not to go more than once in three months.

15115 Mr Moore Q Or any of the same way? A Or any of the same way, not more than once in three months.

15116 Mr Evans Smith Q Well, in connection with this matter, I think there is some statement made by Mr. Hill, Inspector of the Llangelli District, England? A Yes, in connection with the fire which took place at the Bamberley Colliery in 1954.

15117 Mr Evans Smith Q I will read it.—

Mr. Hill, one of the Mines inspectors in this country, had shown us the importance of having some method of making known to the workers generally the position and whereabouts of the exits or exits, in this, should the emergency time they might be enabled more quickly to attain themselves of such exits for escape. This is no doubt, very desirable, and it is, perhaps, a matter which has not been fully considered in England. I would suggest, with this object in view, that facilities of the workers should, from time to time, be supplied to inform them of the exits by way of the miners as they go, and then become familiar with them.

15118 Q Well, Recommendation No 19 was that question of a blacklist? What do you say about that? A Well, as this is a matter not affecting in any way the safety of the persons employed in or about mines, I am of opinion that it should not have any place in the Coal Mines Regulation Act. As to whether the question should be dealt with by legislation it is matter for the Commission.

15119 Mr Moore Q It is the general question? A Yes, your Honour.

15120 Q It would apply to other industries just as much as in the mining industry? A Yes, it does not refer to question of safety in any way.

15121 Mr Evans Smith Q Now, the 50th suggestion is that safety lamps should not be released for charging. How does that stand, in the present state of the law? A This provision is at present contained in General Rule 10. There are, however, other methods of firing shots, and it would, in my opinion, be advisable in present lamps being opened for the purpose. It may, however, be pointed out that it is not so dangerous to open a safety lamp as to fire a gunpowder shot in a working place, one being a small, steady flame, the other a quantity of explosive, and, as a matter of fact, the safety lamp is not a very dangerous thing, in so far as it is concerned with the safety of the miners, and it is equally open for the purpose of firing shots, which is permitted by General Rule 10, as it is open for the purpose of firing shots. I have some little evidence on the question of opening lamps to fire shots, taken from the Royal Commission on Accidents in Mines, 1951, which might be of some interest to the Commission to hear the opinion of the experts. I think, Mr. Evans Smith, perhaps your Honour will take a moment that it is another reference and to be found in Baines and Baines, in "Colliery Working and Management," page 354. I will just read the evidence from the Royal Commission referred to, which is as follows:—W. Laker, Mining Engineer to the East of Durham, was asked—

Q You always fire by means of a naked flame, the top of the lamp being taken off? A Always. I believe, when I stated the number of shots fired daily by us, I said 500, and I mistake not. The average number is really 671.

Mr W. Wright, a miner at Donington, and Thomas Dore Colliery, was asked—

Q How are they fired when you have been? A The deputy removes the lamp, and as soon as he returns on his way, then, of course, he takes his own lamp off and fires the shot.

Q He takes the top off the lamp and he works the flame of the lamp? A Yes.

Q Are you speaking of places where the safety lamps are used in the colliery and the deputy goes and takes his lamp off as he goes to work or as he goes to work? A Yes, of course it is well known there is very little gas, and the lamps are simply used as a precaution, and where that is done safety lamps are given, but they are afraid that some gas might be there.

Mr W. T. Gray, Mining Engineer to North and South Staffordshire, and North Wales, gave the following evidence:—

Q And, in the mines where you have a lamp there, how do you set fire to the flame? A The flame is taken from the lamp off after examination, and given the men the light, and in this case the flame is taken and is given to some distance, and the shot is fired, and then the flame returns and looks round to see if it is all right, and in this case that is all right or touching some distance. Both the idea of the return and the men engaged upon the safety of the shot, and there is the safeguard upon the return of the flame, and the flame is taken off the shot. If there is gas, it is not allowed to work there. If there is gas in the very distant distance, generally, as much as one mile, and there is such as of their being regulated at this distance is carried out. I have worked very much in North Wales as well as Staffordshire.

15122 Q Well, notwithstanding the widespread adoption of this practice, what do you think might be done? A I think that it is to be done, by giving, possibly, the miners and other employees an idea that, if an official lamp is allowed to open a lamp for the purpose of firing a shot, they might claim the mine out of possession for themselves. Therefore, I think it should be avoided, and some better means of firing shots should be adopted.

15123 Mr Evans Smith Q Mr. Ashman, your Honour has just indicated a number of authorities which might be useful to the Commission. I will hand them to me. They are authorities on mining, particularly in reference to colliery explosions, accidents and fatalities, on the one hand, and on mining or working conditions, references as to the quantity of water required for setting and shot, advantages of working and shot, damp proofing mining operations, the quantity of shot that is dangerous, the weight of explosives, papers referring to coal dust in the Commission of the Royal Institute of Mining Engineers and references from "Explosives in Coal Mines," by W. N. and J. E. Ashman.

15124 Q Are references to the passages given in that list? A It is found in the passages are given in these cases.

15128. Mr. Babbitt [Q. Are the whole of those matters referred to in the parcel of books put in yesterday? A. No, there is a whole library referred to here.

15129. [Q. About that?] I think Mr. Atkinson could supply the Commission with any of the books that are wanted.

15130. The list of references referred to was put in and marked Exhibit No. 27.

15131. Mr. Babbitt [Q. Your Honor will remember that I intimated that Mr. Atkinson thought it fair to express his opinion again. Some twenty recommendations in order that Mr. Wade, or somebody in his place, might have a general idea of the trend of Mr. Atkinson's mind, so long as Mr. Atkinson was allowed to reserve to himself the right to a full expression of opinion after the Managers had expressed their views on those twenty recommendations. Now, he has done that, but there are a good many matters dealt with in the evidence of the men which will, so far as I am concerned, mark more fully the men—managers, and Mr. Atkinson thinks it equally fair that he should express his opinion upon some of those questions—they are very few—in order that the Managers may know what his opinion is on those also, but to give a reserve his right to come in afterwards, in case their evidence may have the effect of modifying his present opinions, and of expressing himself differently and finally then. I think that is a fair arrangement.

15132. Mr. Babbitt [Q. It is just as well that they should know what Mr. Atkinson thinks, because Mr. Atkinson is representing the independent party, the Department.

15133. [Q. About that?] In regard to these matters, Mr. Atkinson has not written out his opinions, and the members of the Commission may like to ask him some questions during his examination.

15134. The first is that, some seven was laid upon the possibility of black damp being in its apex in descending the furnace. You remember Mr. Magdalen's some evidence about that.

15135. [Q. You might express to the Court your opinion upon that possibility?] A. Having regard to the large quantity of air which was circulated over the furnace, I think that it is highly improbable that any such discharge of black damp would be likely to be given off as would put out the furnace. There were between 80,000 and 100,000 cubic feet of air passing per minute; and, seeing that it represents 15 to 16 per cent of black damp is extinguish a light, I think it is almost impossible to extinguish such a quantity. I have never heard of a furnace having been put out by black damp.

15136. [Q. I suppose this, physically, possible?] A. It is physically possible. In France they have had one or two cases of outbursts of black damp, or volcanic and gas.

15137. [Q. In the vicinity of the furnace?] A. I do not know whether it was in the vicinity of the furnace; but, had it occurred in the vicinity of the furnace, such an occurrence might have the effect of putting the furnace out, but I am not aware of anything of that sort having occurred in this district.

15138. [Q. Do you think, then, that it is a possibility which should have any weight in discounting the furnace method of ventilation?] A. Not in my opinion.

15139. [Q. You remember that some evidence was given about what they called "mixed lights" in which would give you your opinion as to what the chance "mixed lights" would be?] A. I must say, I have not seen any evidence of working a mine with mixed lights, some open and some closed, that you do not think come under the definition of "mixed lights." I would like you just to tell the Court what your opinion is on that matter? [Q. I think there seems to be some misapprehension, or confusion as to what "mixed lights" refers to. In the Old Country it is generally recognized that "mixed lights" consist of the working face being worked with open lights, and part of the working face being worked with safety lamps. That case, which I have just put, would be, in my opinion, a true case of "mixed lights." In some cases, all the faces and working places might be worked with safety lamps, but mixed lights is permitted on the whole under the rules from the fact that I cannot go to various points, beyond which safety lights were not allowed to pass. That is a case which I do not think has generally been suggested as a case of "mixed lights," although I believe it is so recognized in this case.

15140. [Q. Now, with the first case of mixed lights, the presence of having some of the faces worked with the mixed light, and some of the faces and working places worked with safety lamps—in your opinion, is that safe or doubtful?] A. Well, it may be safe, but I think it is undesirable, as there are opportunities for persons working with mixed lights, perhaps accidentally or unintentionally, going into places which should be worked with safety lamps.

15141. [Q. Then there is a danger about it?] A. Yes.

15142. [Q. A danger of fire, isn't it?] A. Yes.

15143. [Q. Now, with regard to the other portion, of working the faces with safety lamps, and using mixed lights on the main entries, on what you call the Flat?] A. Up to the Flat very often. I think it is desirable that in that case some more definite rule should be given as to the kind to which mixed lights should be allowed, first under the tunnel itself, or the bottom of the downcast shaft, or the men may go.

15144. [Q. He may not, as page 201 of the case, "A warning of fire in the Northumberland, where the whole face is almost invariably worked with open lights, and the gals with safety lamps." Well, in that the men may go.] A. Yes. Some of that might be going on when Mr. May was in England, in the vicinity of Durham.

15145. [Q. How many years ago, roughly?] A. Fifteen years. Where they are safety lamps in any portion of the face, that is almost universal except to one or two in all of the faces. Of course, there are instances, towards the end of the century, in the vicinity of Durham, and also in Northumberland, where they are only mixed lights, actually.

15146. [Q. Then he was asked further, "Q. Are you aware that the mixed light system has been condemned by competent authorities? I said he says—"A. It all depends on the authority. Take Durham, where, I think, they produce 40,000,000 tons of coal, and the system has been open lights in the face, and safety lamps in the gals. Well, that is a repetition." A. Yes, the position has been condemned by the last authorities in the vicinity of Durham, and other mining districts generally, especially by the Inspector at Marnes, who have opportunities of seeing all the collieries.

15147. [Q. Now, you have heard a number of witnesses speak of the successful removal of the air in Blomfield. Will you just express your opinion as to how that might come about, and as to the probability of its being frequent or serious?] A. Well, in the case of a mine, such as Blomfield, with an open shaft 600 feet deep, even with strong westerly winds, I am surprised that such a thing should occur, and I can only account for it on the assumption that, at the time, the furnace had not been properly attended to.

Witness—A. A. Adams, February, 1907

13314. Q With a shallow shaft? A With a shallow shaft I should not be so surprised to have that such a thing had occurred as the reversal of the air, as has been described by an end of the witnesses.

13315. Q And you think that a shaft 150 feet deep is a sufficient guarantee that it will not be produced by a mere change of wind unless there is some other influence operating? A I think it would not occur if the furnace was properly attended to exclusively.

13316. Q That is simply a matter of discipline on the mine? A Yes.

13317. Q The evidence that you have heard of the reversal of air in Mount Kemble, which does not mean, as the evidence itself is concerned, to have been attended with any sequence results—would that be your opinion that the Mount Kemble mine should be allowed to continue the present system of ventilation? A No. I think that the military people would require to be asked to see that the furnace was properly attended to.

13318. Q On Mount J. Q Were any satisfactory means ever been suggested yet, by means of heat applied on the wind, or anything of that kind, to cause wind motion to produce a downward tendency on a shaft? A Not that I am aware of.

13319. Q They have, as you know, been tried with chimneys to a very great extent? A Yes. I do not know of anything that has been seriously tried at the top of furnace shafts.

13320. Q Previously speaking, they are representative, as far as you know? A I should think so.

13321. Q My friend Smith? Q I suppose, if the furnace at a boiler by which a fan is driven was captured, the effect on the wind might be just the same as by the weight of the furnace on an open shaft?

A Quite so, yes.

13322. Q I mean to say that the motive power falls away, the revolutions of the fan are retarded, and the amount of air is reduced? A Quite so, yes.

13323. Q So it really depends, to a great extent? A On human agency.

13324. Q And that is a matter of discipline whether it is a case of a furnace in the shaft, or a case of a furnace under the boiler? A Yes.

13325. Q Edmund? Q Do I understand you to say that you disapprove of naked lights on main roads? A Well, I think that there is a tendency to allow them to go too far, and it would be desirable if some distance, perhaps, from the down-main shaft or tunnel mouth could be fixed by the Commission.

13326. Q For instance, it has been suggested that the Kemble disaster was caused by a naked light on a main road? A Quite so.

13327. Q Which shows the danger of the position, does it not? A Yes, quite so. In the neighborhood of gobs or where falls may take place and so cause an issue of fire-damp.

13328. Q And your own opinion is, that the naked lights, if permitted in a mine at all, should be confined to the vicinity of the down-main shaft or the tunnel mouth? A Yes; or within a reasonable distance, the shaft rising operations.

13329. Q But the explosion itself exemplifies the danger of a naked light, even on a main road? A Yes, certainly it does. I might mention that, in Mr. Hall's report the last year, there is a special rule, which they have brought into force, with reference to the use of naked lights, and he gives a distance there of 500 yards from the down-main shaft, beyond which naked lights should not pass.

13330. Q Mr. Bruce Smith? Q I referred just now to the evidence which had been given by quite a number of the mines as to the proposal that Managers should wear the same mine dress. I saw a reference here to a remark by Mr. McDonald—I think he was a witness whose cross-examination is to some contradiction.

He was asked "What is the average time you see the Manager in your place?" and he said, "I will, Sir James has been there, at the mine, for twelve months or so, and I have not seen him in my working place three or four times." Do you think that the mines themselves, who are working at the time, can find any value in the time which a Manager spends in the mine by the number of witnesses upon which they have seen him? A No, I do not think they can tell it in that way. They can only ascertain from information received from persons who may see the Manager going in and out of the mine.

13331. Q I mean that, as the interested way in which a Manager has to ride a mine, I take it, he might go into some part of the mine a great many more times than into another, and he sees very often, perhaps, by me not at all, and, perhaps, not at all by others? A That might be so. He may be paying particular attention to one part of the mine, and visiting that a good deal more than others.

13332. Q And he may have need to do it? A He may have need to do it at times.

13333. Q And therefore, a man working in a very small part of the mine, which given the management an opportunity, might ensure the Manager's attendance in the mine very infrequently by estimating it according to the number of times he saw him? A Yes, he might pass a wrong impression in that way.

13334. Q And I take it that the evidence of the working men, as to how often they see the Manager in their working places, was evidence as to how much time the Manager spends in a mine? A Generally speaking, not.

13335. Q Now, you remember Mr. May desiring for some time upon some single duty theory of his, by which he said he would "revive"—I use his own word—the Mount Kemble and Balf and Berwood disasters. You heard his evidence? A Yes.

13336. Q Now, I ask you, after knowing the whole of his evidence, are you going to say any single part of it is so likely to show that those three explosions had any common cause, either in fact or in theory? A No, I cannot see any direct connection or comparison between the three, so far as cause is concerned.

13337. Q And from your knowledge of the Balf disaster the Berwood disaster, and the Mount Kemble disaster, can you, yourself trace the three of them, or any two of them, to exactly the same cause in connection with a door? A No. In so far as the Balf explosion is concerned, it took place a number of years before I entered in the Service, and I only know of that from my reading of the report, but from the information afforded in that report, it does not appear to me that the explosion was caused, either directly or indirectly, by a single door.

As regards the Berwood explosion, that certainly had no connection with single doors.

13338. Q Mr. Bruce Smith? Q Data your Honor remember the name of the mine which Mr. May referred to? It is here (in the mine) as "downward," and I think it was Balf.

13339. Q Mr. May? A It was Balf.

13340. Q Mr. Bruce Smith? Q You were here at the time of the Balf explosion. From your knowledge of the circumstances surrounding that explosion, would you attribute it in any way to any door? A No.

Mr.

Mr. May did not give evidence at the inquest in the Dudley explosion, and I am not even whether he was down the pit, but, if so, I do not know how far he was down, nor whether he saw the explosion; but he has referred on several occasions to a single shot in any case, since 150 or 200 yards from the dynamite pit bottom. There was no evidence taken at the inquest to show that that shot had been fired, or had contributed to the accident in any way.

12312 Q Was any evidence given at the subsequent inquiry, at which Mr. Wade presided as Commissioner? A No.

12313 Q Name whatever? A No.

12314 Q Then, coming from those two to the explosion, have you heard any evidence as far, either at the inquest, or before this Commission, which tends to any clue as having been, directly or indirectly, attributable to the disaster? A No.

12315 Q Then you do not understand what Mr. May means? A Well, I take it, that he means, in general, an explosion in single shot.

12316 Q That is, in the district? A A principle which I share with him to the fullest extent.

12317 Q Quote as I will ask you about that. Did you understand what he meant by "contributing" these two disasters with the Mount Kemble disaster as having originated from some identical or similar cause connected with a shot? A No, I do not think that the resemblance warrant such a connection.

12318 Mr. Bruce Smith: I do not know, of course, and I cannot assume, Your Honor, how much importance the Commission attaches to Mr. May's evidence.

12319 Mr. Moore: Perhaps it is as well not to express any opinion.

12320 Mr. Bruce Smith: No, but I want you to understand why I ask these questions. As Mr. May is there, and as he occupies that position, I wish to ask Mr. Atkinson a few questions, because Mr. May may be, and I think he is, held in high estimation by the members themselves, and, therefore, it is as well to answer anything he puts forward.

12321 Q In regard to the proposal Mr. May made as to establishing independent Inspectors, he seemed to think that there was a sort of consensus for members of this body—that have you to say about that? A As a matter of fact, the Inspectors have separate colleges elected in their own district.

12322 Q Is it the case, almost as having separate colleges, as proposed by Mr. May? The colleges are merged? A Yes, and definitely affected in the separate Inspectors, so that there shall be an overlapping and no doubling of duties.

12323 Q And as overlapping of jurisdiction? A No overlapping of jurisdiction. But, if I gather rightly what Mr. May intends, it is to be able to make on a map the districts allotted to the several Inspectors.

12324 Q Well, is there any utility in that? A There is nothing in it, that I can see, seeing that the Inspectors have got separate colleges definitely allotted to them, which is, in effect, quite the same.

12325 Q The only difference between his suggestion, as put before the Commission, and the existing state of things is this, in addition to there being independent Inspectors for different groups of mines, there is a Chief Inspector who has a supervising control over all the other Inspectors? A That is so.

12326 Q And is not that the more risky of things that exists in Great Britain at the present time or in England? A Yes, there are twelve Chief Inspectors for the various districts, and about twenty East Inspectors amongst them.

12327 Q And there is one? A Well, of course, the Home Secretary is one all.

12328 Q Is not then a Chief Inspector? A For some years there was one of them selected as the senior Inspector. That was the late Mr. Worsell, but I am not even whether there is, at the present time, any senior officer.

12329 Q Then what official is it who supervises the general administration under these Inspectors? A The Home Secretary.

12330 Mr. Moore: I think Mr. May said that the system in England was about as bad as it could possibly be.

12331 Mr. Bruce Smith: I think he did.

12332 Q Do you remember Mr. Hodge giving this piece of evidence, in answer to the "Loughlin"? I can show, from Mr. Atkinson's report for 1900, that, during the year, he was reported under general title 4 as follows, which included the Metropolitan, Bally, Corrib, Ballis, Penn, and Mount Pleasant, in the Southern or Western Districts. I propose to show to you that the Inspectors had knowledge of the existence of gas, and took no steps whatever to prevent any outbreak of it, although they knew of it in the various mines? A Yes.

12333 Q Now, first of all, dealing with that generally, is it true? A I think it is better, rather than to give a yes or no, to explain it.

12334 Q Taken as a general statement, is that correct? A No.

12335 Mr. Loughlin: I object to that being taken as a general statement, because he can only answer for himself. He cannot answer for Mr. Bates, who was the Inspector at the time of the Mount Kemble disaster. I submit that a general statement like that should not be permitted by the Commission.

12336 Mr. Moore: You can cross-examine on that.

12337 Mr. Bruce Smith: I am going to ask Mr. Atkinson to deal with each mine.

12338 Mr. Moore: I repeat, remember the details of each report.

12339 Mr. Atkinson: Was that report put in evidence at the time the witness made that statement?

12340 Mr. Bruce Smith: No, but I did not object to that saying that it contained such a passage, because Mr. Atkinson knows that he did draw attention in that report, to the existence of gas in those mines.

12341 Q Can you remember a reference in your report of 1900 to the finding of gas in the Metropolitan Mine? A Yes.

12342 Mr. Moore: We had better have the report.

12343 Mr. Bruce Smith: I thought, perhaps, it would take too much time. I thought Mr. Atkinson could probably deal with it, and show what was done.

12344 Q Can you remember—and you stated we will get the report—what took place with regard to that? Was it not reported that gas had been found in the Metropolitan Colliery? A Yes. I might say, as I think I have already said, that, in order to show to the public and the mining community generally the extent to which findings had been found in mines during the last few years, I have reported six Inspectors

consequence from the report, as if the gas, to say the least, in those moments when the lamp has been extinguished, is not present, and I have observed that in the latter of these cases.

13100 Q Well, under the first case, would anything more have been done than has been done, as the case of these moments in which gas has been found? A No, I do not remember.

13101 Q No, with regard to the Mitrochitch, if you are so anxious, we will take that, as it comes first—just as you were giving your 1803 report, you was told in the Mitrochitch case? A Yes.

13102 Q When was done? A Well, it is a case in which safety lamps are exclusively used.

13103 Q Were they used at that time? A Yes.

13104 Q And safety lamps are exclusively used in that case? A Yes.

13105 Q Can you suggest anything further being done with regard to gas when it being done in the Newington at the present time—I mean with regard to the appearance of gas, the presence of it in the mine? A Well, there was some suggestion made by one of the witnesses that you was not reported when it ought to be.

13106 Q But I am asking as far as the gas that came to your knowledge was concerned, or as far as the gas was mentioned that came to the knowledge of the Inspectors, was there anything further that should be done—that was done? A No. Safety lamps were used, and everything possible was done, so far as I am aware—every eye was taken—strict discipline observed, and so on.

13107 Q Take Bolls, can you remember your reference to the Bolls Mine in your 1803 Report? A I think Bolls has generally been mentioned.

13108 Q What was done in Bolls? A In 1803, I would suggest, as I cannot remember all the circumstances, it would be as well if I had all the papers. They are yours for themselves.

13109 A Yes. I think I think it would be better to have the papers.

13110 My Answer should be. Q As you, yourself, know of any before or on the part of any one of your Inspectors to take whatever steps are necessary in the case of these mines where gas was found? A I do not.

13111 Q How any deviations of duty have brought under your notice with regard to the Inspectors' visits when people there are on mine at that time? A I do not remember any.

13112 Q I think you consider it desirable to draw the attention of the Commission to the evidence of Mr. Scott, page 784. I will read it. He was asked—"Your position is to make an report of any gas", and he answered, "My position is to make no report on gas." He was then asked—"Are you going to continue that position?" and said, "As far as I know, I will." Then he was asked—"If you find gas, you will not report it?" and replied, "It depends on circumstances." Well, as far as that evidence is concerned, Mr. Atkinson, you are quite right to say you not.

13113 A Yes. He should have said that it was a duty of his, by the special rules, to report gas, and I think it is a most respectable attitude for a man to take up.

13114 Q I am not dissatisfied at the action, can you where a man deliberately refuse to report gas in this way—what power have you? A Well, I might have a talk with the man.

13115 Q Yes, to inform, that is possible. I am talking of power. Have you any legal power at all, or is there any legal power vested in any one by which such a man can be punished? A Well, if he were doing the same thing again, if it came to the knowledge of the Stewards, he could proceed against him.

13116 Q You would then have to prove that he knew it, and did not report it? A Yes.

13117 Q You would have to prove that he knew it, by some admission of his, or in some other way? A Yes.

13118 Q Then, in regard to saying that he had frequently seen it but had not reported it to the day, you was his saying? A No.

13119 Q Do you remember Mr. Wynne being in the box, the gentleman who posed as an expert on these matters? A Yes.

13120 Q Do you remember this part of his evidence, quoting of the measurement of air in mines, page 979?

13121 Q Where would you suggest that such measurements as we should be taken? A I do not know anything better can be suggested than what you have at present, with the instruments you have.

13122 My own rule was to measure the air in the working face as I could get it, but I found that was not the rule with the Government Inspectors. I often went in 100 yards nearer the face to take my measurements than the Inspectors did.

13123 Now, will you tell the Court what is the accepted practice applicable to England? A Well, they measure the air in all the mines; if there is any doubt in their minds as to whether the measure is getting into the face, they make one to measure the air in the working place as possible, sometimes on the edge of the first working place, sometimes on the right itself in the middle of the working place, and sometimes at the return airway.

13124 Q That is the recognized practice, which you expect every Inspector to adopt? A Yes.

13125 Q Is that the same as the English practice? A Yes.

13126 Q Well, we may differ in opinion as to whether it is necessary to go up to the face, may they not, I mean, somewhere you will find such a quantity of air at a distance of 100 yards from the face—

13127 A Well, when there is a doubt about a leakage.

13128 Q It is not possible that one air may think there is no doubt about it, and that there is no need to go right up to the face? A Yes. There is no doubt it is a matter of opinion as to what is the best place to measure the air.

13129 Q He says here, "I often went in 100 yards nearer the face to take my measurements than the Inspectors did." That is quite compatible with there being enough air in the Inspectors' position? A Yes.

13130 Q That position in the mine is that in gas in England? A Yes, when I talk.

13131 Q I mean, when you talk, the position there was the same as that adopted here now? A Yes.

13132 My Answer? Wynne specially speaks, if I remember rightly, about the impossibility of measuring small quantities of air, because, 100 yards from or so with the air mass at present in air—measurements.

13133 My Answer should be. He said the measurement would not show it.

13134 He shows. He also spoke about the arrangement, dipping to show the velocity in the course of an accident. Those questions might be of importance.

13135 My Answer should be. Q Well, with regard to those questions—first as to the measurement, in measuring very small powers or quantities of air, what is the average power of the anemometer? A I do not think you can depend upon it to measure a velocity of less than 1 foot per second, and, unless you measured the air going up to the face of a working place, into a small section by a box or a pipe, the anemometer, as now constructed, will not measure the air passing across the face, unless the velocity is something considerably more than 1 foot per second.

13435 *Mr. Johnston* [Q] As a matter of fact, is not the construction of the anemometer for distant fairly revolutionary in its nature? That is to say, it takes fairly revolutionary to have the anemometer, and when you take your measurements you add things revolution for distance? A Yes.

13437 [Q] Is it not possible in nearly all cases, to get a measurement of air in some part of the yard where the velocity is sufficient to act upon the anemometer? A To you refer to near the working place?

13438 [Q] Nearly everywhere, there is some part of the area where you can take fairly accurately the velocity of the air? A Oh, yes, certainly.

13439 *Mr. Brown Smith* [A] But I understand, Mr. Johnston, this is the objection offered by Wynne, and by a number of the witnesses, that, although the aggregate quantity of air may be going into the mine, the leakage in various ways are so very great that the pure quantity of air does not reach the working place, and Wynne goes on to conclude that the Inspector did not measure right up to the mine, as he did, but sometimes only measured to be away in 100 feet. Mr. Johnston says that an anemometer will not measure these small quantities unless you concentrate the air into a small space. Therefore you must be satisfied to know that the aggregate quantity is going in up to the point of which the anemometer comes to be a leak, and you must know in your arrangement of your canvas and stoppage and so forth, and, I suppose, to the pointed leakage of the mine, is usually pointed that that air is getting up to them.

13440 *Mr. Johnston* [Q] Of course it must be definitely understood that the fact of not being able to measure the velocity on the anemometer does not necessarily mean that the actual quantity of air is not going in to the mine.

13441 *Mr. Brown Smith* [A] No. Wynne complained that the Inspector sometimes took the measurement 100 yards from the face.

13442 *Mr. Johnston* [A] He said that the Inspector took it at the splits, and that he often went 100 yards nearer the face than they did. Where the air splits they have generally got a mark about where they take the anemometer. At this place the men often take regularly take their anemometer. Wynne's contention was that this place was too far from the face, and he said he went nearer to the face to take his measurements.

13443 *Mr. Johnston* [A] That is not the measurement of the air 100 yards away in the face, after all, nearly the air goes between timbers and timbers.

13444 *Mr. Johnston* [Q] Of course there might be leakage.

13445 *Mr. Brown Smith* [A] If there were a big leakage in the 100 yards it would be important, but if the Inspector included himself that there is no big leakage in that 100 yards, the difference would be neither here nor there. I take it that the Inspector would not take the measurement at the splits if there were, on the next 100 yards, where he observed which would affect the quantity of air going through.

13446 *Mr. Johnston* [A] I think Wynne thought that some law should be made to compel measurements to be taken in near the face as possible.

13447 *Mr. Brown Smith* [A] The question I come to is that when you bring anemometer reads to hear on the anemometer of that is it, whether measurements to take large or hydrogen lamp, they expect them to do reliably more than they will do. They expect satisfactory results from them. For instance they expect hydrogen lamps to be used to make a complete examination of the mine once a month, get a big hydrogen in English says he does not say it is correct, but he says that, for his part, he thinks that when the gas is in such a proportion that only the hydrogen lamp will measure it, it is really not worth measuring, and that the safety lamp is sufficient for practical purposes. We know that the hydrogen lamp is made—as much as a gas. The meter, on the other hand, is not so thick that the selection of the diameter in the hydrogen lamp being taken everywhere could be so.

13448 *Mr. Johnston* [Q] They advocate that as an additional safeguard, but they do not expect that it should be relied upon wholly. I would suggest that Mr. Allison should tell you the distance that should be maintained.

13449 *Mr. Brown Smith* [A] What opinion have you formed about that? Have you heard any evidence which points to the fact that the temperature is the basis of taking the air carefully, or at places which are not a fair guide? A No. There is no reason to think so.

13450 [Q] It is not very trouble to an Inspector to take it at some point than at another, except the walking over the 100 yards? A No, not so long as the anemometer will register, no more trouble.

13451 [Q] You heard Mr. Wynne speak of the distance between taking the measurement of air in the middle of the road, and taking it at the splits? A Yes.

13452 [Q] Can you say anything about that? A There is no doubt that the velocity of the air in the center of the place is greater than at the side, where there is friction, but the commonly accepted method of measuring the air is in the center of the place. For a more accurate and accurate purpose the section of the gallery is sometimes divided by strings into several different small areas, and the anemometer is held in each of these areas for half a minute, or a minute, or the time may be less, or order to measure the actual quantity of air.

13453 [Q] And the average is taken of all these readings? A Yes.

13454 [Q] That is the usual course as is pursued in measuring the velocity of a stream in hydrology? A Yes, I suppose so.

13455 [Q] But it is not used in a precise method in actual practical working? A Only for experimental purposes, where they are actually studying the efficiency of a fan.

13456 *Mr. Wynne* [Q] Do I understand that the system adopted in the mine, to hold the anemometer in the center? A Yes, that is the usual plan.

13457 [Q] That would be adopted where the velocity is pretty high, and the friction comparatively small. If you multiplied that anemometer in the center of the mine you would get a very much larger result than if you measured against the wall? A Not a very much larger result, and I think it is bad as the construction of the anemometer in the first place to the fact that the usual method is to measure the air in the center of the place.

13458 *Mr. Johnston* [Q] As a matter of fact, the velocity in mines in case of large material area is usually comparatively low? A Where the air is very large and it would get down to 2 feet per second, or less. The velocity of air in working face or in a good sized roadway velocity, from 2 to 4 feet per second.

13459 [Q] I take it that, if your experience in taking these measurements, found that the velocity in the mine was rather high, it was due to the wind, so to speak, in some quantity, that it would probably take place to take an accurate measurement? A They do. They take care to get under the working place.

12400 Q And as a rule the quantity is largely in excess of the dictatory requirements? A Yes, generally that is so.

12401 Q So that there's not that need for the utmost precision in taking these measurements? A No, I think they can generally tell by their noses, in a certain extent, whether the steam getting to the face; and, where indirect lights are used, by the reflection of the flames the master can generally tell whether he has a reasonable quantity of air.

12402 Mr. Bruce Smith: Q I suppose it is open to the check inspector to measure where he likes? A Yes.

12403 Q There are no restrictions upon him? A No.

12404 Mr. Bruce Smith: Q We can take his measurements at the side, can he not? A Yes.

12405 Q Yesterday you stated that you were prepared to recommend that disputes and that force should be required to have a certificate before they could be considered qualified for appointment? Yes.

12406 Q Now, if disputes and disputes have a certificate, would you also provide that, in the event of any breach of duty, they should be liable to have their certificate suspended or annulled? A Yes, that should follow as in the case of a Manager or under manager.

12407 Q And that would be a check upon those men in case of their not reporting gas? A Yes.

12408 Mr. Justice: Q To whom would you have the power vested to suspend or cancel their certificate? A The same sort of power which is now managed for the Manager and under manager, the same sort of tribunal.

12409 Mr. Bruce Smith: It simply brings two more classes under the operation of section 30.

12410 Q I think you will observe that a great many of the witnesses seemed to draw a distinction between discovering gas, and discovering an accumulation of gas—several of them said—"I did not report it, because it was not an accumulation?" A Yes.

12411 Q Is not that expression used somewhere in the rules—"An accumulation of gas"? A I think it may probably be in the special rules.

12412 Q Is not that an element of danger, that men should be able to escape from the responsibility of reporting by saying, "Oh, I certainly discovered gas, but I did not discover an accumulation of it, it was not, in my opinion, an accumulation." I think you have formed the opinion that that might be obtained in some way? A Well, General Rule 4 does not contain any quantity at all. It says that they had to report, specifying whether necessary or unnecessary gas, at any, was found present.

12413 Mr. Bruce Smith: Your Honor said that that special rule makes it too strict. A man may say—"I discovered gas, but I did not discover an accumulation of gas, I did not think it sufficiently important." If time expires and that does not have to be required to have something, the amount of gas, or the way in which you indicate that, which they are required to report, might be very dictatory word, so that they would not be able to say, "Yes and yes," I did not report it when the witness told me, because I did not think it sufficiently important.

12414 Mr. Adilova: Q In the case of a gassy mine, where gas is given off, and known to be given off, at any part of any working face, and where you can find (coming from the face, by putting your lamp against the face, would not the effect of reporting gas be practically to stop the mine)? A I do not think so.

12415 Q But if, according to the rule, you have got to clear away the gas you have found, how can you clear away the coming of the gas? A You can only clear it away as it does come.

12416 Q You have you have to clear the gas away before you admit the men into the place; and, if you report having found gas, what do you do before you admit the men? A Well, under General Rule 4, I do not see how you can draw the distinction between a large quantity of gas and a small quantity.

12417 Q Where so, but if you can find gas coming in a gassy mine at any part of the dip, how are you going to admit the men into the place, do you not see the difficulty? A I think that the rules generally say something about a strong blast cap.

12418 Q Where so. I say, take a mine where you can find gas coming sufficient to show a blue ring on a safety lamp in any place at any time of the day, how are you going to admit the men to work? A Well, the rule seems to be so constructed as to admit them to work. You cannot work in a gassy mine.

12419 Q But, under those circumstances, you have to report for finding of gas, and you have to clear it away before you admit the men? A Well, it is clear that you cannot clear the mining away. You can only clear the gas away in a short way.

12420 Q But then you say that under those circumstances you must report the mine, not the accumulation, but the mine, that being so, you would have to be reporting all day, and you could not possibly admit the men into the place? A I can only say when I read in the rule. It makes no distinction as to the quantity. I see the difficulty which arises, but I do not see any objection to maintaining a lamp of gas in every working place in the pit.

12421 Q But do you not see the difficulty: if you go into a place, and do not find a candle, but find gas coming from the roof, you cannot admit the men? Q Well, then, I think the rule should be altered so to make it that you can admit them.

12422 Q Where so. You see the difficulty? A Yes, I fully recognize the difficulty, and know that in some cases you can get gas in all the working places by careful adjustment of the safety lamp, by throwing it right into the roof.

12423 Q As a matter of fact, is not that rule intended to apply to accumulations? A I do not see that. I cannot agree with you there. Of course it says that the rules have to be observed, in far as it is reasonably practicable, but it makes no distinction as to whether the gas is from an area or whether it is an accumulation, or whether it is a small quantity, a theoretical or a bonfire.

12424 Q Of course I quote the importance of reporting the smallest trace or appearance of gas in a mine where it is not generally known to come, but if you have a gassy mine, where it is admitted in mine, and known to exist, and to be found in any working place? A Yes. I take it that the term "an accumulation" means that it is admitted that gas is given off all over, but there is no accumulation in any working place.

12425 Mr. Bruce Smith: Perhaps, after all, Mr. Bruce Smith, it may be that that distinction between gas and accumulation of gas was only in the check inspector's report. It may have arisen from that. I do not find it here in the special rules, but the words "An accumulation of gas" were used in the check inspector's report.

12426 Mr. Bruce Smith: If you please it is not. Wyse directed that they did not report gas, whether it accumulated or not.

13111. *Mr. Howe:* [Q] A good deal may be due to the composition of the powder. There might be an excess of carbon, for instance? A: A good deal is due to that. As to the resulting gas, Professor Vernon Lewis says that, using 1 lb. of ordinary blasting powder, you get over 2 cubic feet of combustible gas, consisting chiefly of carbon monoxide, and that, mixed with certain proportions of air, will give you 13 cubic feet of an explosive mixture.

13112. *Mr. Bruce Smith:* [Q] So that the idea is right that, after a shot, under certain circumstances, you do get an explosion incident to the working place? A: Yes. It is quite possible that the explosive gas will amount to nearly 50 per cent. in some cases.

13113. [Q] Well, is that due to that mix of carbon, gaspowder, or would that apply to the other explosives, which you have told us are permitted by the House Committee? A: Well, it is more pronounced in the case of gaspowder, although I believe, to a smaller extent, it is possible with some of the permitted explosives.

13114. [Q] Well, then, that is an additional danger, apart from the opening of the light and the firing of a shot, the possible explosion of the gaspowder gas in an additional danger where there is coal-dust? A: Yes, no doubt.

13115. [Q] All incident to the powder? A: Yes.

13116. *Mr. Johnston:* [Q] Are you referring now to the comparative length of the flame, or to the inflammability of the gaseous products? A: To the latter, to the inflammability of the gases resulting from the shot.

13117. [Q] But I thought some of these safety explosives were of such a character that the resultant gas was non-explosive? A: Well, I believe in some under the heading mentioned, but I have seen particularly some of the explosives which have stated that some of the resulting gases are too small extent explosive under certain conditions.

13118. *Mr. Bruce Smith:* [Q] But I take it that gaspowder produces the largest quantity of the most explosive gas? A: Yes.

13119. *Mr. Johnston:* [Q] That is another reason why it should not be used? A: Yes.

13120. *Mr. Bruce Smith:* [Q] Now, is it not difficult for an inexperienced person to distinguish between the gas which is produced by an incandescent gaspowder shot, and gas which might be excited by the breaking down of the coal? A: I think it is impossible to distinguish, because they both give blue flames.

13121. [Q] Well, ought that not to be reported as either one, if that is not? A: I think it would be better. It is certainly advisable.

13122. [Q] And if the deputies and shot fires are to be notified, and if their certificates would be little or contribute in suspension for a breach of the rules, and if they are to be required to report gas, ought they not also to be required to report an explosion of that kind from gaspowder, or from another explosive? A: I think they ought to.

13123. *Mr. Howe:* [Q] Easily for the reason that, if such explosions were reported, the management might think it is not a different kind of powder? A: Undoubtedly.

13124. [Q] Because the composition of the powder might have a good deal to do with it. An excess of carbon or charcoal—any more of it? A: Yes, that may be a good deal to do with it.

13125. *Mr. Johnston:* [Q] Have you ever heard any instance of an explosion from the flames or the gas of the safety explosives? A: I am not very clear about that, but I think there is some discussion or legal action going on at Home as to whether safety flames are really safe.

13126. [Q] I mean safety explosives? A: Oh, the permitted explosives.

13127. [Q] Yes. Have you ever known any instances of the gases from the explosion of a permitted explosive igniting in the way that gaspowder gas has been said to ignite? A: No, I have not. I do not know of any case, although, of course, one knows of cases where safety explosives have been recklessly used, and there have been explosions—such an instance as trying to break up a wheel by placing on it an unbalanced quantity of "Forsyth's" explosives—[*Indisputable*].

13128. [Q] But as to the explosives themselves, you do not know a case where the gas resulting from the explosion of a permitted explosive has been lit? A: No, I do not know of any case.

13129. *Mr. Bruce Smith:* [Q] The gas resulting from the explosive combination of gaspowder really comes under General Rule 4, does it not? A: Yes. A report specifying whether carbon or inflammable gas—it would be included under that general phrase? A: Yes.

13130. *Mr. Atkins:* [Q] Before you pass away from that, I understood Mr. Atkinson to say that the gas which may be generated as the result of a shooting shot comes under General Rule 4, as regarding?

13131. *Mr. Bruce Smith:* [Q] Well, he says that it could be brought under the general ones.

13132. *Mr. Atkins:* The present General Rule 4 deals with the danger of the vapours.

13133. *Mr. Howe:* [Q] The vapours would not discover the shot, and then it would be their duty to report it.

13134. *Mr. Bruce Smith:* [Q] But they might hear of it, and then it would be their duty to report it.

13135. *Mr. Howe:* [Q] It is a case which is clearly not contemplated by the rule.

13136. *Mr. Bruce Smith:* No, but it comes under the general term. Suppose an explosion in the course of his explosion, now a shot fired, and, on the course of the explosion, he went into the place after the shot had been fired, and he saw this explosion of gaspowder, well, I believe that circumstances are pointed enough to include that, and he should report it. Yes, we discussed, here, to suggest how this shall be explained, and I point out that the possibility of an explosion by gas should be reported under General Rule 4. Then, under Rule 5, the deputy, if he discovers any danger, shall instantly report to the overseer, under manager, or Manager.

13137. *Mr. Atkins:* [Q] That is in the special rules?

13138. *Mr. Bruce Smith:* Yes.

13139. *Mr. Atkins:* Well, that does not cover the firing of shots. I want to know from Mr. Atkinson whether he thinks that General Rule 4 does deal with that.

13140. *Atkinson:* No. I think it would come under General Rule 4, which says that if workmen discover any defect or immaturity in their working place they must at once leave work and report.

13141. *Mr. Johnston:* [Q] Well, a Deputy would be bound to report? A: Yes.

[Q] As a matter of fact, such a mistake going was once mentioned when that rule was formulated? A: No, I do not think it was. It might be useful to have an authority on that. I have a book here. Perhaps the Commission would like to see what Professor Lewis says about it.

12513 *Mr. Anderson* [I know some people believe that, but when that rule was framed such a contingency was never contemplated].

12513 *Mr. Bruce Smith* [But it is pointed enough to cover it, if it should come under the notice of the Inspector. Then, also, Special Rule 11 says: "All employees must report to the Manager or official in charge any defect they may discover in the machinery or appliances, or any appearance of fire, steam, smoke, steam, or other running gear, or any defect in the roof or sides of the mine, or any other defect likely to cause danger from any other cause." If the miner is going to make a suggestion by word of mouth, to consider the chances of accident, it is as well to advise him, so long as there are men who are working in the mine, are allowed to pass over the rule by saying "Oh, it was not gas, fire, steam, it was only gaspoder, and therefore I need not report it," it is a loop-hole which besets a very great danger.

12514 *Mr. Anderson* [It is, practically, a danger which has been pointed out before this Commission, and has not been pointed out before, so far as the rules and regulations are concerned.

12515 *Mr. Anderson* [I do not think that, as a copy of the Royal Commission that have met at Home, any mention has been made by any witness, in any shape or form, directly or indirectly, as to the possibility of danger from gaspoder gas.

12516 *Witness* [No, I do not remember having seen it myself.

12517 *Mr. Anderson* [It is a very serious thing.

12518 *Witness* [It is.

12519 *Mr. Bruce Smith* [It will just show the Commission how seriously men reason with regard to this. Here is Mr. John, who is well known under manager, a certified man, and, when asked "Then, if you find anything after a shot is fired, you conclude that it is gas from the gaspoder?" he says "Yes, unless it appears to give off." You see he recognizes that there may be both, but if one is really asphyxiated, that is from the gaspoder, and, if it continues to give off, it may be gas which is being emitted from the coal liberated by the fall.

12520 *Now, here is the Appendix that Mr. Atkinson was referring to on the gaspoder case, volume IX of the "Transactions of the Institution of Mining Engineers." [The book was shown to the Commission.]*

12521 *Mr. Anderson* [I have just noticed the difference in the composition given by Lewis, and that given by Percy. Lewis gives 50 per cent. of combustible gas, and Lewis gives 50 per cent. of carbon dioxide, 30 per cent. of nitrogen, and 10 of carbon monoxide, so that that is practically asphyxiated. I say "No doubt a great deal depends on the composition of the explosion.

12522 *Q Now, here is another powder, mining powder, carbon dioxide 32 per cent., carbon monoxide 52 per cent., nitrogen 10 per cent., unhydrolyzed hydrogen 1 per cent. Well, one would not think, at first glance, that that was explosive. You see it is so ascertained. Here is a gas containing 52 per cent. of carbon monoxide and 52 per cent. of CO₂, where you had 5 per cent. of the heavy, and the rest air.*

12523 *Mr. Bruce Smith* [Does not that seriously show that that gas is explosive?

12524 *Mr. Anderson* [Well, it seems to me, that with 52 per cent. of carbon monoxide, hardly any mixture would be explosive.

12525 *Mr. Bruce Smith* [Have you got Percy then?

12526 *Mr. Anderson* [Yes.

12527 *Mr. Bruce Smith* [Does not he give that?

12528 *Mr. Anderson* [He gives the very same percentages.

12529 *Mr. Anderson* [It is a very serious thing that the question has not been brought before any other Commission, considering the millions of shafts that have been laid, one would think it was a matter of common knowledge.

12530 *Mr. Bruce Smith* [But these men speak of it as a common thing.

12531 *Mr. Anderson* [That is the remarkable thing about it.

12532 *Mr. Anderson* [They may be mistaken.

12533 *Mr. Bruce Smith* [It may be so.

12534 *Mr. Anderson* [Yes.

12535 *Mr. Bruce Smith* [Mr. John seems to have said and at a sort of distinction which he draws between those which explode and those which explode and continue. He is a bit of a student from what I remember of his discourse.

12536 *Mr. Anderson* [And then we have the evidence of Mr. Atkinson himself, who says it is practically impossible to distinguish the flame of one from the other.

12537 *Mr. Bruce Smith* [At all events, it points to this conclusion inevitably, that, whatever they say about it, it ought to be reported.

12538 *Mr. Anderson* [You, that is so.

12539 *Mr. Bruce Smith* [Q Now, there is one question with regard to the difficulty which the men told they had experienced in distinguishing between gas and water in producing that singing noise. Are you able to say anything on that point? A Well, I think that water itself might come without the singing noise, but, when accompanied with the singing, I think it is due to gas.

12540 *Q Then, I understand that you think that the Commission may like to find, whenever men heard the singing noise in any case, although they did not know whether it was water or gas, you think it may be taken to have been gas? A That is so.*

12541 *Q You think the water would not make that noise? A No.*

12542 *Mr. Anderson* [Q While water gas comes out, I suppose, it is impossible. A I think not.

12543 *Mr. Anderson* [Q It is really the expansion of the gas that causes the noise? A Yes, the lighting of the gas and the water.

12544 *Q It is really like the running of steam out of an engine pipe? A Yes, that is really an illustration of it.*

12545 *Mr. Bruce Smith* [Q Now, you heard Hunsford's evidence, the day before yesterday, in which he said that he had never been instructed to report these places, like the water and of Mr. I think, because the men had not been working there. What do you say about that? A Well, I think it is desirable that the law should be altered, either by offering General Rule 1, or the special rules, so as to include such places.

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13572 Q As the rules stand at present, would the deputy really be implicitly instructed to use those places, or would he be well advised in saying that he had not received instructions, because he had not had specific instructions? A Well, General Rule 4 actually does not require him to inspect those places, so it stands there.

13573 Q Because it is not a working place, and it is fenced off? A Because it is not a working place, as one in which persons were in past.

13574 Q The workers are not likely to work or pass there, that is the place, is it not? A Those are the words.

13575 Q And that is what you say you think should be altered? A I think so, yes.

13576 Q Because that accumulation of gas, which you found in the back loading, might have gone on, would the outer edge of it come past the fence—I mean, supposing it were left? A In the absence of ventilation, that might take place.

13577 Q Of course it is fair to say that the ventilation was all stopped at the time up at that point? A Yes.

13578 Q But still that inspection by a deputy is necessary to see that the ventilation is going on, so as to get rid of that accumulation? A Yes, I think so, especially having regard to the fact that the air goes on in other ways.

13579 Q My attention? Q Mr. Atkinson, it is open to the Department to propose a special rule now to deal with that? A Yes, it is.

13580 Q Mr. Atkinson? Your Honor remonstrates that man, Bell, who was once examined by Mr. Wade. He referred to a man named Waples, and I think your Honor said something about Waples at the time, but I do not think it is very important. Bell and Waples was nearly blown up in Moose Kunkle. I am not saying it is important that he was nearly blown up.

13581 Q Mr. Atkinson may or may not know something about it.

13582 Q Mr. Atkinson? Q Yes, remember that, passage with regard to Waples? A I do.

13583 Q Do you think it is of any importance that he should be called? A Well, I think we have had sufficient evidence of the same character, and, unless there is some special circumstance attached to it, I do not see any particular necessity.

13584 Q Mr. Atkinson? The witness went on to say that it was not brought to the notice of any official, and therefore it could not have been pointed to Mr. Atkinson's knowledge.

13585 Q Mr. Atkinson? I think that is all I want to ask Mr. Atkinson at present. I am afraid we are in a difficulty. I have checked upon either Mr. Lysight or Mr. Barry being prepared to take up Mr. Atkinson's examination or cross-examination, whichever it turns out to be, and I have no other witness here at present.

(Mr. Lysight suggested that Mr. Barry should cross-examine first. Mr. Barry thought Mr. Lysight should cross-examine first. Eventually Mr. Lysight insisted to cross-examine his cross-examination at once, though he would have preferred to have waited until he had had time to confer with counsel. Mr. Atkinson's evidence is that)

Cross-examination by Mr. Lysight.—

13586 Q I want to know why it is that you express no opinion on Recommendation No. 12, "Constitution of the committee of Mr. Rogers?"

13587 A Mr. Atkinson? Oh, the Commission practically got that out of the question, because that is not a question which the Commission thought ought to be gone into at all, the question of the constitution of the committee of Mr. Rogers. That question was discussed a long time ago. That is why Mr. Atkinson did not express an opinion, because he was not asked.

13588 Q Mr. Lysight? But I take it, Your Honor, that I can get his opinion as to certain things done by the Manager, showing that he was not a competent Manager, and that the practical management of the mine was defective.

13589 A Mr. Atkinson? Oh, you can go into that question.

13590 Q Mr. Lysight? A moment—do I take it that Your Honor holds that anything that may have been done by Mr. Rogers, irrespective of the cause of the disaster, can be gone into here?

13591 A Mr. Atkinson? No, only matters connected with the disaster. The Commission here to find out whether anyone is to blame, and, if so, who. Of course, under that head of the duties of the Commission, Mr. Lysight might ask some questions.

13592 Q Mr. Lysight? Q You know that Mr. Rogers admitted that the suspension of the work was only done once a month? A Yes.

13593 Q In your opinion, did the failure to suspend the work once a week contribute in any way to the untimely cause of the disaster? A I am thinking that it would.

13594 Q Would it be a circumstance that would, most probably, lay the conditions for the disaster? A I do not exactly understand the question.

13595 Q Would the failure to suspend once a week probably cause conditions to arise which did cause the disaster? A I do not see how that could cause the disaster.

13596 Q I will put it in detail. Taking your theory of an explosion of gas and air from the 30 feet gas, would not an suspension weekly of that gas probably have prevented that accumulation of gas? A I do not think I have suggested an accumulation of gas, Mr. Lysight.

13597 Q Will, would it not have prevented that quantity of gas that, in your opinion, was forced out from the gas, being allowed to remain there undisturbed, had an inspection been made regularly every week, unopposed by the rules, is it not probable that the knowledge of gas in that gas would have been easily ascertained? A Yes, that is so.

13598 Q And the knowledge of gas in that gas being easily ascertained—[interrupted] A Near to the edge of the gas—it might not be profitably made to go very far in, after the fact had been drawn out.

13599 Q And, having that knowledge, it is probable that the management would have been in a position to take steps which would probably have avoided the disaster? A In there was an accumulation, doubtless it would.

13600 Q Now, does not your theory assume that there was an accumulation in the gas? A Not necessarily. It might have been up in the mine when the fall took place.

13601.

12400. Q. But, in view of the evidence that the first fall did take place a week before the disaster, do not you think that the accumulation resulted from the first fall? A. No, I could not say that that is very probable.

12405. Q. But it is not more probable that the gas that was leaked out of the mine had been standing there for some days, and was not the immediate result of the then immediate fall? A. It is possible, but I cannot say that it is highly probable.

12407. Q. The inspection of the mine each week would have detected conditions that would have pointed to danger? A. If they discovered gas, yes.

12409. Q. Well, the fact that the deputy had discovered black damp before pointed to a source of danger, and if an inspection had been made every week—[interrupted].

12410. Mr. Barry: Might I ask that he says that the deputy having discovered black damp would indicate a source of danger, then he should tell us another fact.

12411. Mr. Barry: That ought to be put by itself.

12412. Mr. Barry: Mr. Lyngbult asks three or four questions, and you get an answer down that does not necessarily what the witness means.

12413. Mr. Barry: It is not fair to ask a question in such a way that the witness appears to answer more than he does.

12414. Mr. Barry: I am sure Mr. Lyngbult does not mean it, but he makes statements too.

12415. Mr. Lyngbult: Q. Is it not probable that, if that water had been leaked every week, the damp would have been discovered in it? A. No, I cannot say that it is probable, or was probable.

12416. Q. And in view of the fact that only 3 feet of the wall had fallen, or that there had only been a fall of 24 feet, would it not have been practicable for Marston to have gone much further into the goaf to inspect that he did? A. Well, I do not know how far he did go.

12417. Q. Well, he said he only went to the fence.

Mr. Justice Smith: No.

12418. Mr. Lyngbult: In the edge of the fall.

12419. Q. Well, in view of the fact that the fall was only 24 feet, was it not practicable for him to go much further, and make a more perfect examination? A. I think he might have gone beyond the fence and as far as it was safe to go.

12420. Q. And it was practicable to go further, in view of the fact that the fall was only 24 feet? A. It might be practicable, but it might not be safe, having regard to the fact that the timbers were all down, and a further fall was anticipated.

12421. Q. So a good like that 25-acre goaf was in not had management to carry on beside as way put it out as to the men? A. Without any separation between the mine and the water?

12422. Q. At the north end of the goaf, the evidence is that there were five openings, and the water came down there, within any reasonable? A. Well, as I understood the plan [interpreting the evidence by the plan] the water on the floor was [pointing to Day 30 to 31] was directed to them by means of courses down on the 5th Right rope road. There would be a certain risk [although] of air through the courses down, as down along the 5th Right rope road, and that would be for the purpose of keeping that road clear, and ventilating the mine.

12423. Q. You put it that way, more [but] to get air that passed the openings on that goaf? A. Yes, the air passed along the 5th Right rope road, on the north side of that goaf.

12424. Q. And you know that there were about five openings on that 5th Right rope road from the goaf? A. Yes, there was.

12425. Q. Is not that an evidence of bad management? A. If those openings had no stoppings of any kind on, I say "Yes".

12426. Q. And you did not observe any stoppings there? A. On the north side?

12427. Q. Yes? A. No, I did not, but they might have been there before the explosion.

12428. Q. But there were no stoppings there?

12429. Mr. Justice Smith: There is no evidence of that.

12430. Mr. Lyngbult: I understood from Marston that there were five openings that came out of that mine. I intended to put the evidence in law, and I understood that is what he said.

12431. Q. You heard the evidence of pillars having been left standing in that goaf, that they lost whole pillars—would not the presence of those pillars probably make a considerable discharge of fire-damp? Is it not probable that a considerable discharge of fire-damp would come from those pillars that had been lost in that goaf? A. Well, I think it is possible that there might be a certain amount. I could not say a very considerable discharge.

12432. Q. And, with the knowledge as the management that those pillars had been left there, do you think that the failure to examine every week, and the failure to get the consequences every month, was an act of gross negligence, in addition to being a violation of a rule, was it not clearly in act of negligent management, knowing that pillars were standing there, to allow them water to be only inspected, was it not? A. Well, it depends a great deal upon where the pillars were left, so as to whether the atmosphere would be likely to reach anywhere near the entry in the 5th Right. We do not any evidence of exactly where those pillars were left, except that it was somewhere on the 25-acre goaf. It might be in such a remote position that any fire-damp got off from those pillars would not reach the vicinity of the entry in the 5th Right.

12433. Q. But, the pillars being left there, and the management knowing that, was it not an act of negligence in the management to leave the inspection only once a month, instead of weekly?

12434. Mr. Justice Smith: What Mr. Lyngbult really means is, did it not under it still more (perhaps) to the management to be careful to keep up to the weekly inspection, as there was a definite mystery, a barred pillar, something about there?

12435. Mr. Lyngbult: That is it.

12436. Q. Now, if the pillars were anywhere near the vicinity of the 5th Right I would say "Yes".

12437. Mr. Lyngbult: Q. And, in view of the fact that black damp was discovered there a week before the disaster, was it not an act of gross negligence not to have that water examined every week? A. Well, it was a breach of the rules.

12438. Q. In addition to being a breach of the rules, was it not an act of gross negligence in the management not to have it examined every week, having discovered the black damp? 12439.

19131. *Mr. Brown Smith* | How Your Honor thinks that a proper form of question, asking a witness whether he thinks it an act of legal negligence? *A* Yes.
19132. *Mr. Brown Smith* | There are too many questions.
19133. *Mr. Brown Smith* | What is an act of legal negligence? *A* Yes, it was an act of negligence.
19134. *Mr. Brown Smith* | And, do you now say that that act of negligence was not a factor contributing to the disaster? *A* I cannot see the connection.

(At 2 p.m. the Courtroom adjourned till 2 p.m.)

ATTORNEYS

(On returning at 2 p.m., Mr. W. B. Pratt attempted to take classified notes of the Evidence and Proceedings.)

Mr. A. A. ATKINSON, previously sworn, was further examined as under:—

19135. *Mr. Brown Smith* | With the large size of the 25 acre waste road standing, say fall would cause a large quantity of dust to rise in the 4th Right? *A* Provided that there was a considerable quantity of dust and a considerable fall.
19136. *Q* You know that there was a considerable quantity of dust, both on the 4th Right and on No. 1 travelling road, before the disaster? *A* There was a certain quantity.
19137. *Mr. Brown Smith* | Q. It has been stated during the course of the proceedings that one of the stoppings was blown out. What, in your opinion, was the probable effect of that dust which would have if it were blown out into the engine road? Would you consider it as a factor in the matter? *A* Do you mean, suppose the dust was of the best quality, as merely got stuck?
19138. *Q* Did you examine those stoppings to see whether the material had been blown up with small stuff? *A* There were a number of stones, and dirt, and shales. I could not say that there was much of the fine sort of dust that you meet on the tracks on the bridge road.
19139. *Q* The material in those stoppings, then, would not be fine enough to roll dust? *A* Some witness had said that they were filled with fine dust.
19140. *Mr. Brown Smith* | *Q* Would the fine dust be blown away by the time that you made your examination? *A* Of course, I made my inspection after the explosion. There were deposits in certain places, but the deposits of dust after an explosion are not always true indications of the condition of the road before.
19141. *Q* Would it be likely that the witnesses knew the fine stuff away? *A* If there was an opening at the top of the stopping, the lighter stuff would go first.
19142. *Q* Like Your Honor said that one of the stoppings had no opening at the top, and that this was blown out?—
19143. *Mr. Brown Smith* | *Q* I am alluding to a stopping which was actually blown out. It is a stopping north of the 5th Right, between the engine heading and the back heading, and it was blown out into the engine road. *A* Yes.
19144. *Mr. Brown Smith* | *Q* Did it not consist of rough stuff? *A* I did not observe much of the fine stuff there.
19145. *Mr. Brown Smith* | *Q* With the probability of a considerable fall in the 25 acre waste, raising a cloud of dust, and blowing out the dust of the stopping, and that such a fall was anticipated a week before the disaster, was it not negligence on the part of the management not to systematically water the 4th Right and No. 1 travelling road? *A* There was no legal obligation.
19146. *Q* Apart from legal obligations, was there not negligence on the part of the management of the railway? *A* Opinions are so divided as to the merits or otherwise of watering dust, and it is not by any means general in the industry yet, therefore I could not say that it could be called negligence in the way you suggest.
19147. *Q* In your opinion was it not negligence not to systematically water No. 1 travelling road and the 4th Right?—
19148. *Mr. Brown Smith* | Ask him, if he had been Manager himself, would he have thought it consistent with his duty, and a proper thing to do, to water those roads?
19149. *Q* *Mr. Brown Smith* | What do you say to that? *A* I hardly know how to answer it, because I have mentioned the legal obligation in connection with the question.
19150. *Mr. Brown Smith* | *Q* It is not a matter of legal obligation. What Mr. Brown Smith is asking you, supposing you had been Manager, and knew exactly how things stood, do you think that, as a matter of fair practice, you would have watered the 4th Right and the No. 1 travelling road? *A* Well, I think it would be a laudable thing to do.
19151. *Mr. Brown Smith* | Do you think that you would have done so? *A* I cannot say whether I could or not.
19152. *Mr. Brown Smith* | *Q* Do you know the condition of the dust at the time?—*[He answers]*
19153. *Mr. Brown Smith* | The question is asked on the assumption that it was a dry part of the season.
19154. *Mr. Brown Smith* | *Q* Quies the contrary, No it was wet.
19155. *Mr. Brown Smith* | The evidence is that there was a lot of dust there.
19156. *Mr. Brown Smith* | I think the evidence is that it was dusty.
19157. *Mr. Brown Smith* | *Q* Do you know what evidence had been given as to the dusty condition of the 4th Right before the disaster? *A* Do you mean speaking from the evidence?
19158. *Q* Yes. *A* There is evidence that there is a certain quantity of dust in the neighbourhood of the 4th Right travelling road.
19159. *Mr. Brown Smith* | *Q* Is there any evidence of dust being in the vicinity of No. 4 Right? *[He answers]*
19160. *Mr. Brown Smith* | *Q* You said that the state of the road at the present time is not to be compared with what it was before the disaster?
19161. *Mr. Brown Smith* | He said the same generally.
19162. *Witness* | I know that after the accident I saw a quantity of dust in the neighbourhood of the 4th Right.
19163. *Mr. Brown Smith* | *Q* In its neighbourhood? *A* Yes, I made a note of it at the time.
19164. *Q* I have now water running out of it? *A* There is a certain amount of water there.
19165. *Mr. Brown Smith* | *Q* Taking the evidence as you have quoted in no, there was a dangerous accumulation of dust in the No. 4 Right and on the travelling road? *A* Under certain conditions.

13555 Q And is it such that a dangerous quantity of dust such as you have expelled from the anthracite, can come from one day's working in the ordinary course of a mine? Do the witnesses say that one day would be sufficient to cause a dangerous accumulation of dust? A The dust is only dangerous under conditions of that being, or gas in the air mixed with dust.

13556 Q You have given us certain measurements in terms of at proportion of dust-and-gas—Could this dangerous condition of dust accumulate in one day's ordinary working of a mine? A It depends on the quantity of material being passed over the road.

13557 Q Take one of the main haulage roads. Would one day's work be sufficient to accumulate a dangerous amount of dust? A Under certain conditions it might.

13558 Q The conditions being such as you have described, will you not admit that it was positive negligence on the part of the management not to systematically water the travelling road and the haulage road? A I cannot say that it was.

13559 Q Will you say, without it being positive negligence, that there was not negligence in not watering these roads under the conditions which you have described? A Yes, I do not think it would be.

13560 Q It is not negligence on the part of the management then, would it be negligence on the part of the management not to water under these conditions? A I think it would not be until the law is altered.

13561 Q I am not speaking of the legal obligation, but of the practical working of a mine. Should not Mr. Rogers have had the travelling road and the haulage road watered? [He answers.]

13562 Mr. Justice [Q] Would you have them so, had you been Manager, with the knowledge you have now? A With the knowledge I have now, I think I would.

13563 Mr. Justice [Q] Was it not negligence on the part of the Manager not to do it? [He answers.]

13564 Mr. Justice [Q] That is an inference that can be drawn, or not, by the Court. The answer of the witness is, that he would have done it himself in the exercise of his discretion with the knowledge he has now.

13565 Mr. Johnston [Q] May I ask Mr. Johnson if he views as to what constitutes a dry and dusty mine has been altered to some extent since this disaster? A No.

13566 Q Did you consider this a dry and dusty mine? A Well, the term "dry and dusty" has never yet been defined. It is to some extent an open question. Although there are certain parts of the haulage road which may be described as being dry and dusty, I do not think that on the whole anyone can call it a dry and dusty mine.

13567 Q Perhaps since the explosion what we call a dry and dusty mine must be revised? A There was doubt that a much smaller quantity of dust is dangerous than was formerly thought to be the case.

13568 Mr. Justice [Q] Was not all the knowledge as to the dangerous qualities of dust known as far back as 1888? A Well, there had been several explosions attributed to coal dust, with the presence of gas, but opinions were very much divided, even in 1888, as you will see by a glance at the evidence given in the 1891-1894 Commission.

13569 Q For some years before the disaster the Commission emphatically pointed out the danger of coal dust and the necessity for systematic watering? A They suggested it, although the Legislature had not made it beyond the Act of 1897.

13570 Q And in various instances in England for the last ten years, systematic watering has been carried out? A Yes, I think so, on some haulage roads.

13571 Q And in a number of instances in this State? A Systematic watering—do you mean of the whole of the mine? A

13572 I mean of the travelling and haulage roads. [He answers.]

13573 Mr. Justice [Q] What do you mean by systematic? A Do you mean regularly?

13574 Mr. Justice [Q] Do you know that? A It depends on what you call systematic watering.

13575 Q I mean the watering of the travelling road and the haulage road with spray? A No.

13576 Q Do you know whether the Newmarket collieries have been watering systematically for the last six or seven years? A No, they have not.

13577 Q Do you know of any collieries in this State where the haulage roads have been watered systematically? A Do you refer to the roof and the sides, and the floor?

13578 Q I am speaking of passing only of the floor? A I dare say that floor has been watered.

13579 Q Do you know whether before the disaster there were any instance of watering the roof, adequately, at Newmarket? A I think there is evidence of some time being used for the purpose.

13580 Q Will you not admit that the law is more absolutely inadequate to water the floor, apart from the sides and the roof? A I think, perhaps, they were.

13581 Q Then, with the knowledge available to colliery managers for the past seven years of the danger of coal dust, and the necessity of watering, will you not admit that the management was guilty of negligence in not watering? A No, I cannot admit it, as it was not an acknowledged custom in the State.

13582 Q I do not see whether it was an acknowledged custom or not. Here is the evidence of certain things that were dangerous. Would it not be negligence not to water Newmarket Colliery? A Yes, I think it would be now.

13583 Q Well, was it not equally negligent on this part before the disaster? A Well, with the recent knowledge of the explosion, I think it would be negligent now, although it could hardly be said to be negligence before the explosion.

13584 Q With the knowledge of the explosion, and knowing as the management did, of the presence of gas and the danger of dust and gas, would it not be equally dangerous then as now? A I cannot say that it would.

13585 Q Are you prepared to say that it was not? [He answers.]

13586 Mr. Justice [The witness admits that it would be negligent now, would it not also be negligent before the disaster?]

13587 Mr. Justice [The witness admits that it would be negligent now, would it not also be negligent before the disaster?]

13588 Mr. Justice [The witness admits that it would be negligent now, would it not also be negligent before the disaster?]

13589 Mr. Justice [The witness admits that it would be negligent now, would it not also be negligent before the disaster?]

13700. Q Can you tell me any greater knowledge about coal dust which could be gained from the explosion? A Oh, I think there was sufficient knowledge rendered by the explosion in England.
13701. Q No doubt knowledge of what? A Perhaps you will put your question again.
13702. Q I ask you what additional knowledge, with reference to the danger of coal dust, has been afforded by the disaster, which was not already afforded by the English explosion? A I do not think that there was any.
13703. Q That being so, cannot we leave the Kenzie disaster outside the question? A I do not see how we can do that.
13704. Q If the knowledge was available, as to dangerous conditions before the disaster, in what way was the disaster safe at the negligence of the Company in not watering? If by should it be negligence not to water now and not negligence not to water before the disaster? A Well, the effect of the explosion has brought the matter so heavily before everyone as the mining community, and before everyone connected with mining.
13705. Q Is that the only reason? A I do not know of any other.
13706. Q Was it not brought sufficiently before the notice of mining managers and others by the common test books issued before the disaster? A If they had read them.
13707. Q Then you admit that the knowledge was available in the mining test books? A Yes.
13708. Q Well you can admit that it was negligence on the part of the Managers not to water.
13709. *Mr. Dwyer:* Which was negligence? Not to water, or not to read the books?
13710. *Mr. Dwyer:* Evidently the negligence was not reading the books.
13711. *Mr. Dwyer:* The question is whether the negligence in reading the books constitutes negligence.
13712. *Mr. Dwyer:* I want to clear this matter up, and I accept your opinion as final as far as I am concerned. If it would be negligence not to water now, was it not also negligence not to water before the disaster?
13713. *Mr. Dwyer:* Q Mr. Arkness has answered that question before? A Yes, I have answered it.
13714. *Mr. Dwyer:* Q Now, is it a fact that once the disaster the management at Kenzie has adopted an improved system of watering? A I do not know that you can describe it as an improved system; but they have adopted a system of watering.
13715. Q Is it a system which accords with your approval? A On the haulage roads—yes.
13716. Q They have purchased apparatus? A They have taken going round which operates pumps, and this causes sprays of water on the haulage road.
13717. Q Before the disaster they had some of these appliances? A No.
13718. Q But it not strike you with your knowledge of the danger of coal dust, that you should have made some recommendation as to the advisability of the Kenzie Company watering their mine?
13719. *Mr. Dwyer:* Are you speaking of before or after the disaster?
13720. *Mr. Dwyer:* Q Before the disaster? A I did make a recommendation to the Company before the disaster.
13721. Q Did they carry out that recommendation? A They might have done so. It only referred to the watering in connection with the firing of shots under General Rule 12.
13722. Q Leave that alone for a moment. You confined your recommendation to the practice of watering in the mining of firing a shot. Did it not occur to you that in order to preserve the Kenzie Mine from the danger of a dust explosion, it would be advisable to have all haulage and travelling roads watered? A I sent a circular letter to the Manager, but it was in such terms as I considered were within the power of the Inspector.
13723. Q Apart from the power you are speaking about, have you not a general power of ordering anything to secure the safety of a mine? A No, watering is specially provided for by a general rule.
13724. Q Do I understand that you felt the want of power to give orders regarding watering at the Kenzie Colliery? A I cannot say that the matter came before me.
13725. Q If you did not feel the want of power in the matter, will you tell me why you did not order the Kenzie Colliery Company to water their roads in view of the danger which you have noticed from coal dust? A I did not have the power to do it.
13726. Q You say you never felt the want of that power? A I do not understand you.
13727. Q Well, you say you could not do it? A I cannot order a Colliery Manager to water the whole of the haulage roads and the travelling roads. I sent out a circular giving orders as far as I could.
13728. Q Was not the disaster contained in the number of little value? A Well, the reason which you suggest has never been, so far as I know, adopted in the old country as here. I did not feel that I was justified in taking that course.
13729. Q Will you not admit that, generally speaking, your consider was of no value with a view of preventing such a disaster as occurred at Mount Kenzie? A Yes.
13730. Q So I may take it that you did nothing to suggest that directions should be taken with a view of preventing such a disaster as did occur? A Not beyond sending out the circular, and giving the result of the testing of the dust.
13731. Q When you sent out the circular giving the result of the testing of the dust, did you not consider that it was essential to have the travelling roads watered as well as the haulage roads? A I do not know what I intended in the case.
13732. Q Will you not admit that it was essential that the travelling roads should be watered as well as the haulage roads? A There was no mention of the haulage roads in the circular.
13733. Q Was not the firing on the haulage roads? A The recommendation was not confined to the haulage roads. It referred to any dry or dusty place. That is, shots were not to be fired in any dry or dusty place without watering.
13734. Q You knew that shots were being fired all over the mine? A Yes, in the working places.
13735. Q You knew that some parts of the mine were dry and dusty? A Yes, on the haulage roads.
13736. Q And that some parts of the working face were entirely dry and dusty? A I could not say that.
13737. Q Do you not know that work was going on in the highest part of the mine? A Yes.
13738. Q Do you not know that the 4th Left was a deep section? A I know that there was dust on the rips road of No. 4 Left.

13743. Q. Why did you not see that your reconnaissance about watering the place was carried out? A. I had nothing to tell me that it was not carried out.

13743. Q. Did you inquire? A. I had not time, in the interval between the ending out of the mortar and the explosion, to visit the mine.

13744. Q. I do not see about your visiting the mine. Did you make any inquiry? A. I received reports from the Inspector, and expected him, actually, to mention any irregularity, as he is interested to do. I had an impression of any irregularity of that kind.

13745. Q. Did you do anything which would enable you to discover whether your suggestion was being carried out? A. I cannot say. I made an specific visit, or inquiries, beyond the inquiry I received from the Inspector.

13746. Q. In view of the fact that the Kambla chart was found to be "entirely exploded," will you not admit that it was material to know whether the watering reconnaissance was being steadily carried out? A. Yes.

13747. Q. Can you give any explanation for not having said whether they were being carried out? A. I would find out from the Inspector.

13748. Q. You found out in another way—by the explosion? A. I did not find out.

13749. Q. Have you got the reports of Inspector Bates produced, Your Honor? A. Yes.

13750. Q. Can you produce them? A. Yes.

13751. Q. Will you have the reports of Inspector Bates produced, Your Honor?—

13752. Mr. Bates? Q. Can you produce them? A. Yes.

13753. Then I shall be glad if you will have them read by Messrs? Yes, Your Honor.

13754. Mr. Justice? In the Bates' reports, is there any mention of watering being done at Kambla? A.

As far as I remember, there is not.

13755. Q. The reports afforded you no information with regard to the watering? A. The inference is, if the watering had not been done—

13756. Q. I said that they afforded you no information? A. Not expressly, but inferentially they did.

13757. Q. Did Mr. Bates know of your communication to Mount Kambla? A. Yes.

13758. Q. I suppose you frequently saw Mr. Bates between the time of the making of the reconnaissance and of the disaster? A. Yes.

13759. Q. Did you ask him? A. I do not remember.

13760. Q. Did Mr. Bates ever, in writing or by word, make any single mention of the watering being done at Kambla? A. I do not remember whether he did or not.

13761. Q. Can you remember whether he made any mention of the duty conditions which existed at Kambla? A. I do not know that he did.

13762. Q. On the 20th April, 1901, you wrote a letter to the Manager of the Kambla Company, from which the following is an extract—

"It is necessary, in the event of blasting taking place in your gallery or dry and damp places, that the requirements of General Rule 11, section 42, and that Mine Explosions Act should be strictly complied with, and the custody of the shots thoroughly watched, as required by that Rule."

And, on the 15th of May, you wrote to the Manager asking him that you would be pleased to hear from him in regard to the matter. I want to know what you, or your Inspector, did from the 20th of April to learn whether Rule 11 was being strictly complied with? A. The first time with reference to the Mount Kambla Mine?

13763. Q. Yes? A. I did not visit Mount Kambla in the interval.

13764. Q. What did you do to see that the General Rule was strictly complied with? A. The Inspector would visit the mine, to see whether or not it was strictly complied with.

13765. Q. That is an assumption? A. Yes.

13766. Q. May I take it that you have no knowledge of having seen anything specifically to see that General Rule 11 was strictly complied with? A. I have no knowledge that the rule was not complied with. I have knowledge that the Inspector visited the mine before the explosion, and after the 15th of April.

13767. Q. Have you any knowledge of the Inspector's having visited the mine when blasting was being carried out on the Kambla mine? A. No.

13768. Q. Have you any knowledge that the Inspector visited the mine when a shot was actually being fired, and was some time in fact? A. I should think it very probable that he would be there.

13769. Q. Have you any knowledge that he was present when a shot was fired? A. I have no knowledge, but I should think it very probable that he was present.

13770. Q. You have no knowledge whether this inquiry was carried out or not? A. I will not admit that.

13771. Q. But you cannot give me any knowledge that you have? A. I did not visit the mine.

13772. Q. Did you not hear Mr. Rogers admit that he never had the running of a place watered, when that firing was going on, after having received that notice from you? [No answer.]

13773. Mr. Justice? I do not think that there was any such evidence.

13774. Mr. Justice? Mr. Langford had better show it to the Court.

13775. Mr. Langford? Q. Here it is in the report of the evidence given by Mr. Rogers to the Inspector.

"We have no objection at all to watering the end, sides, and bottom, and on some days, indeed, there is a hole not far from the end made for a considerable time, for one or two months, in the face of any working, we have great regard to the immediate neighbourhood of a shot; we have no objection for that, and it has never been done."

13776. Q. Did you see such knowledge that he had not watered? A. No.

13777. Q. Do you know that, although he got your letter he admitted that he did not bother to have the place watered? A. Yes, I know that.

13778. Q. Will you admit that Mr. Rogers did nothing to carry out Rule 11? A. I do not know that he fired shots in a dry and dusty place.

13779. Q. Do you not know that shots were being fired in the 4th Left? A. Do you mean in the working alone?

13780. Q. Yes. Are they not dry and dusty? A. I do not know that they can be called so.

13781. Q. Do they not present dusty conditions that are dry and dangerous? A. I saw that there after the explosion.

Scene.—J. R. Sweeney, 1 February, 1900

- 12792 Q Can you mention anything which you did not see that this expert inspect which you made no error attended to? A Nothing beyond what I have described.
- 12793 Q And you leave the attendance of the Manager that he never witnessed at all? A Yes.
- 12794 Q Will you not admit that that was negligent? A If he fired a shot on a dry and dusty place, yes.
- 12795 Q If he ever fired a shot at all? A Not unless it was on a dry and dusty place.
- 12796 Q I am taking the working places on the 4th Left. If a shot were fired in there, and the place was not watered, and you not admit that there was negligence? A If the place was dry and dusty.
- 12797 Q Do you not know that the majority of these places were dangerous—that they were in a dangerous condition? A I do not know.
- 12798 Q Have you any reason to suggest that they were not? A I do not know that they were or were not.
- 12799 Q And you not hear Mr. Rogers admit at the inquest that he did not know what the result of the analysis of the Mount Kemble coal dust had been? A I believe he said so. It was not an analysis, but the result of an experiment to show the explosibility of the dust.
- 12800 Q Was that not negligence on the part of the Manager of the mine not to know the result of the experiments relating to the coal dust? A Yes, I think it was.
- 12801 Q And in your opinion now, had the Kemble Mine been watered as you directed (a year before) might the disaster have been avoided, or is it probable that it would? A No, I do not think it would.
- 12802 Q Did not coal dust play a large part in propagating that disaster? A Yes, I think it did.
- 12803 Q If the 4th Left working road and the headings roads had been well watered, would not the explosion have been confined practically to the No. 1 main level? A I think it would have had a tendency to have had that effect.
- 12804 Q It is a fact then that, had part of the mine been watered the extent of the disaster, in your opinion, would have been considerably reduced? A If it had been watered for a sufficient length, I think it would.
- 12805 Q Then will you not admit that it was negligence causing death, on the part of the management, not to sufficiently water that mine for a sufficient length? A I do not think it could be so described.
- 12806 Q What would you call it—what would you give it? A Well, if the explosion had been as suggested it would have been negligence.
- 12807 Q I am not suggesting an explosion, but I am suggesting serious dangers that were known to be there. But, coming to a case of you before the disaster—you had notice of Gallagher's hearing? A Yes.
- 12808 Q You had notice in the evidence of Mr. Kemble, before the Commission on the Coal Mines Bill, that Kemble was constantly going off gas in all parts? A Little gas.
- 12809 Q You had the evidence of a previous Manager several times, in the same report, that Kemble had given off gas? A I do not remember having read his evidence.
- 12810 Q And you have any special inspections made to determine whether the Kemble Mine was giving off a dangerous quantity of gas? A Statutory inspections, and the ordinary inspections, were made from time to time by the different inspectors.
- 12811 Q Did you ever have an inspection made with the hydrogen flame? A I do not remember that I did.
- 12812 Q Did you make an inspection with the hydrogen flame in any other colliery? A I have done so.
- 12813 Q Knowing that, with coal dust, fire-damp to the extent of 1 per cent is dangerous, and that the safety lamp will not detect less than 2½ per cent, did not you consider it necessary to have an important mode of Kemble with the hydrogen flame? A The machines you suggest are only likely to arise when a shot is fired.
- 12814 Q Are not the whole of your machines relating to coal dust only likely to arise when a shot is fired? A So from an explosion of fire-damp.
- 12815 With the knowledge which you had that one man had been burnt with gas, and that a Manager admitted that the colliery was giving off gas in all parts, did you not think it necessary to have an examination made with the hydrogen lamp? A I had an examination made on a neighbouring colliery but was unable to find anything.
- 12816 Q Which colliery? A Kears.
- 12817 Q How long before the disaster? A I cannot remember now. I can find it from my notes.
- 12818 Q How long? A I cannot say.
- 12819 Q You thought it necessary in the Shewan district, south of Mount Pleasant, to make an examination with the hydrogen flame? A I do not know that I thought it necessary, but, having the hydrogen lamp with me, I did it.
- 12820 Q Did you have any result? A No.
- 12821 Q You made an inspection of a colliery in a case where you knew a man had been burnt? A That is so.
- 12822 Q Can you give me any reason? A I suspected Kemble with the ordinary safety lamp.
- 12823 Q Is it valuable for coal dust?—[interrupted]
- 12824 Mr. Sweeney: I object to the question.
- 12825 Mr. Sweeney: Q. Would not the inspection be valuable as far as an explosion from coal dust and fire-damp is concerned? A No.
- 12826 Q Would not the ordinary lamp fail to detect the small amount of gas which might cause an explosion in connection with coal dust? A If a cloud of coal dust was raised, yes.
- 12827 Q Do you know whether the District Inspector made an inspection with the hydrogen lamp? A I supplied him with one.
- 12828 Q Did you ever inquire whether he made an inspection with the hydrogen flame? A I do not think he did.
- 12829 Q Do you know whether he made an inspection of Kears or Mount Pleasant with a hydrogen flame? A I do not know whether he did or not.
- 12830 Q Was Kears the only colliery on the South-Coast that you examined with the hydrogen flame? A I cannot find it in some other place.
- 12831 Q Did you examine Mount Pleasant? A I cannot come to it.
- 12832 Q Is not this the fact—that you relied on the report of the inspectors and the management of Mount Kemble, so far as the presence of gas is concerned? A No, certainly not.
- 12833 Q Do you know how often the Inspector tested for gas? A On every inspection, I expect.

- 12804 Q How often would that be? A As or eight times a year, possibly. I do not know exactly.
- 12805 Q He did not work at regular periods? A No.
- 12806 Q He might not go for three months? A He might not.
- 12807 Q Do you know when it was he went before the disaster? A Either the end of March or the beginning of April.
- 12808 Q And on that occasion he was only a few hours inspecting? A I do not know how many hours.
- 12809 Q Was it not only a report of one day's inspection? A No, two days. He was in the mine in July also.
- 12810 Q Did you give a report? A No.
- 12811 Q It was an inspection? A It was an inspection.
- 12812 Q Do you always give a report? A After this inspection I concluded.
- 12813 A Yes. Answer. Q I think he was there a fortnight before the explosion? A Yes.
- 12814 Q And on the day of the explosion? A Yes.
- 12815 A Yes. Answer. Q Was he completing it? A He was rather completing it, or he would require another day.
- 12816 Q Does he report show what part of the mine he visited? A Yes.
- 12817 Q Does it show that he visited the back landing and No 4 Left? A It does not specifically mention them.
- 12818 Q Does he specifically mention other places? A We can see where the report comes up.
- 12819 Q Then it may be in as good a way, that so far as the presence of gas is concerned, an inspection was made of the Hunk Kamble Mine with the hydrogen lamp? A Not so far as I know.
- 12820 Q And a proportion of gas, which could not be discovered with the ordinary safety lamp, would have been quite sufficient to have been responsible for this disaster, if it was caused with a kind of dust named by a Mr. T. A Yes.
- 12821 Q You do not suggest that there was any greater degree of fire-damp, or a factor in this explosion, than an amount under 2½ per cent? A There may or may not have been.
- 12822 Q Do you think there was? A I cannot tell. It would be quite impossible to tell.
- 12823 Q There have been three parties—first, as far as the inspections were concerned, the danger to be met with by gas to a mine, and the danger of dust, were in the mine. The result was the disaster, and an inspection was ever made to guard against these dangers? A Well,——[interrupted].
- 12824 Q I mean that you made an inspection to guard against these dangers? A The inspection was made to detect a percentage of gas, which might be an important element in a disaster, no doubt, but certain other conditions.
- 12825 Q Do you not think that your District Inspector was failing in his duty in not examining the Kamble Mine with the hydrogen lamp which you supplied it with? A There may be means which he could give, which were known to him, why he did not try with the hydrogen lamp.
- 12826 Q Did you ever ask him? A I do not remember whether I did or not.
- 12827 Q He has never told you any reason? A No, I do not think he has.
- 12828 Q Will you not admit that it was his duty to examine with the hydrogen lamp in Kamble before the disaster? A Well, I do not remember whether he had any special instructions to see the hydrogen lamp in any mine.
- 12829 Q Will you not admit that, as an Inspector is responsible, to a certain extent, for the safety of a mine, it was his duty to have examined Kamble with the hydrogen lamp? A I do not think it was.
- 12830 Q Then you do not consider that it was your Inspector's duty, or your duty, to examine Kamble with the hydrogen lamp? A I do not think it was our duty.
- 12831 Q You do not think you were called upon to do it in order to ensure the safety of the mine? A No, I do not think so.
- 12832 Q Then I take it that you do not consider that your duty with us you to make an inspection for things which are immediately dangerous? A I think if we could have the conditions which you suggest, so that we could inspect under these conditions it would be practically our duty to do so.
- 12833 Q I do not follow you? A You suggest a set of conditions not likely to arise when we have an opportunity of inspecting.
- 12834 Q Do you say that it is not your duty, or the duty of your Inspector, to inspect for a thing that is known to be dangerous and liable to cause a disaster? A I do not say that. I say that if you could produce the conditions of things which you suggest, or we could anticipate them, and have a chance of inspecting under those conditions, then we would inspect at that time.
- 12835 Q What are the conditions which you want to make it your duty to inspect? A You suggested a set of conditions. A cloud of dust, a certain percentage of gas, and a naked light.
- 12836 Q Are not those conditions likely to arise at any time in a mine? A No.
- 12837 Q Are there not always danger of there being a cloud of dust in a place which is not worked—in those not danger of there being less than 2½ per cent of gas in a place known to give off gas at all parts. Then you have the dust on the roads—you have under 2½ per cent of gas, and you have the naked light. Now, were not all those three things in the Kamble Mine? A We are not likely to have 2½ per cent of gas on the rock outside our road.
- 12838 Q I do not say that you were? A There are the conditions you put to me.
- 12839 Q Were not these conditions realized at Mount Kamble? A No.
- 12840 Q What portion of these conditions were not realized? A The cloud of dust, and the 2½ per cent of gas were not there.
- 12841 Q Do you not know that you had had notice that gas was being given off in the mine? A I have had notice seven years before that the mine had given off gas.
- 12842 Q Had you any means of knowing, or any knowledge that gas was not being given off under 2½ per cent? A I think it is likely that it might have been given off.
- 12843 Q Was it not the duty of your Inspector to examine with a hydrogen lamp? A I cannot admit that.
- 12844 Q Then you do not consider it part of your duty, or part of the District Inspector's duty, to examine a mine where there are dangerous conditions which might lead to disaster? A I do not say that.

Witness—S. A. Adams, 5 February, 1959

13481. Q Will you admit then—that the failure to examine the fans that were not being worked was negligence in the management? [He groans.]

13486. Q You heard the evidence of Horrocks that the trip leading to the 4th Left—that there was eight or ten birds down which had not been attended by him, are you aware that Special Rule 9 of the Keweenaw Cullery states that the deputy shall make a true report of, and enter and sign daily on a book the state of the mine roads, battens, and the fans? Now, will you admit that it was negligence on the part of the management not to have them in an exact and daily? [He answers.]

13487. A Sorry. I think that Mr. Egan might ask whether it was the duty of some one to supervise examinations.

13488. A Yes. [Mr. Egan:] Mr. Egan might ask management of a mine.

13489. A Yes. [Mr. Egan:] Was that not bad management of a mine—you know Special Rule 9? A There seems to be some doubt whether the word "fans" should not be read in connection with the words "working fans."

13490. Q Will you tell me when that doubt was first raised or where it came from. Have you any doubt as to what that word means. As Chief Inspector, reading Rule 9, have you got any doubt as to what the word "fans" means? A It means the fans of the mine.

13491. Q Investigation of whether it is being worked or not. Will you not admit that there is just as great a danger involved in a fan not being worked, as in a fan being worked? A Yes.

13492. Q And is it not essential to have daily inspection? A Do you mean whether working or not?

13493. Q Yes? A I think they should be inspected.

13494. Q I asked you whether it was not just as essential to have the fans examined which were not being worked, as the fans which were being worked. And your answer is "Yes"? A Yes.

13495. Q Now, is not the fact of the 4th Left being left unattended for weeks evidence of bad management? A Yes, I think it was.

13496. Q And is it not probable, in view of the fact that gas was discovered in those particular fans, that the presence of gas there helped to propagate the explosion? A In my opinion it had that effect.

13497. Q Do that in your opinion some of the causes of the explosion are traceable to the fact that gas was allowed to accumulate in the mine? [He answers.]

13498. A Yes. [Mr. Egan:] There is an evidence that gas did accumulate in the mine.

13499. A Yes. [Mr. Egan:] Where a big fall is expected over a large area what precaution should be taken to guard against possible danger from that fall? A Do you mean if gas is anticipated?

13500. Q I asked it whether anticipated or not. The witness was known to be in possession of gas—and I want to know when a large fall is anticipated, what precaution should be taken or good against that fall? A I do not see that you could go beyond warning the workmen from the vicinity of the fall.

13501. Q Would you not have all the phone watered in the vicinity of the fall? A I have never known it to be done, to such a case.

13502. Q Would you not consider it advisable? A If you were anticipating gas with a fall which might possibly move a cloud of dust, I think that you should water the place, especially if you are using naked lights.

13503. A Yes. [Mr. Egan:] You would not water the floor where the fall was going to take place.

13504. A Yes. [Mr. Egan:] Here you say further answer? A If you have any kind of fire-damp being forced out, and naked lights are in use, I think watering should be done in the vicinity.

13505. Q Is there anything else you can suggest? A I do not know there is anything else to be done.

13506. Q Did you observe that in Keweenaw birds were driven 100 yards without any outcroppings? A Yes.

13507. Q Did you take a measurement of the air in any of those birds? A No.

13508. Q Were men working in them? A Yes.

13509. Q Was the location a good one—did you go up to the door? A Yes.

13510. Q Was the location a good one? A As far as I can remember.

13511. Q Now, I suppose that you will say, so far as Keweenaw is concerned, that there is no necessity, as regards the safety of the mine, to drive birds 100 yards without outcroppings. I mean that it is no necessary for the safety of the mine to have long drives? A I do not say that it is absolutely necessary at Keweenaw. But you might suppose the size of the pillars in other directions.

13512. Q Is it no possible harm would be done by having outcroppings every 30 yards. I am taking Keweenaw specifically—you know it is not a deep mine? A It might be necessary to increase the size of the pillars in other directions if you did it.

13513. Q Is what other direction? A By increasing the width of the pillar.

13514. Q Would there be any harm in having outcroppings every 30 yards? A What do you mean by harm?

13515. Q Harm in the Keweenaw Cullery? A I do not know that there would be any harm in Keweenaw.

13516. A Yes. [Mr. Egan:] It is not good mining practice to have pillars as large as possible? A It is. With increase of depth you want large pillars.

13517. Q As a general rule? A As a general rule it is better to have large pillars.

13518. A Yes. [Mr. Egan:] Now, at this tip leading to the 4th Left have they got what you call the dog end of the intake air? I mean that birds were driven 100 yards, and stopped with air that had been in a number of men before it reached those birds? A Yes.

13519. Q Those birds were also a considerable distance from the furnace? A Yes.

13520. Q And the return air had to travel a considerable route to go to the furnace? A It had to travel a considerable distance.

13521. Q Had you any word that the men working in those birds were not getting their adequate supply of air? A I had no reason to think that they were not.

13522. Q Did you bother to take a record? A I did not measure the air.

13523. Q Did you measure it anywhere? By you not know that the men complained of it being hot? A I have heard it said. I had no complaint before.

13524. Q You say that you had no knowledge, but that the men have complained since that the air was hot and bad, and I asked whether you took any record to see whether the air was good? A The air was good, so far as I remember.

13525. Q Did you take a record? A No.

- 19305 Q So that you cannot say? A I can say. You do not require to measure the air to see whether it is good or not.
- 19306 Q Can you tell me when you measured the air? A I have not usually measured the air myself.
- 19307 Q Where did you measure it? A I did not measure it at all.
- 19308 Q As far as any measurement is concerned you do not know? A So far as any measurement by the instrument concerned I do not know.
- 19309 Q You treated in the first of the air about your body? A Yes.
- 19310 Q You say that you do not make a practice to record the air yourself? A Not usually, unless there is some complaint or something of that sort.
- 19311 Q Is the chance of complaint? A No.
- 19312 Q You allow your these officers? A Yes.
- 19313 Q On whom do you rely for the measurement of the air? A On the Inspector for the District. I say any time I sometimes measure it in consultation with him when I am doing with him.
- 19314 Q You told us that a District Inspector might not go to a colliery for three months? Yes.
- 19315 Q If you relied on him for your records of the air you might only have a record every three months? A That is so.
- 19316 Q And for the remainder of the time—the intervals between these records by your Inspector—whether you or he would know what air was passing through to the men? A That would be so.
- 19317 Q Do you not think, then, that your District Inspector should take records of the air more often than three months? A No, I do not think it is necessary unless there is some complaint.
- 19318 Q As Chief Inspector do you consider that you are carrying out your duty so far as seeing that the men get an adequate supply of ventilation, by only having a record every three months? A Well, there is also a stationary duty on the part of the management to insure to the air once a month.
- 19319 Q Are they bound to furnish you with a copy of the measurement? A No, not unless we ask the colliery.
- 19320 Q There would be no difficulty in the District Inspector visiting the mines once a month? A There would be a great difficulty.
- 19321 Q A great difficulty by oversight? A Yes.
- 19322 Q Do you think that you want some additional Inspectors? A I do not believe in carrying Inspectors. No, for, because there is a tendency to make Managers think that they may be referred to part of their responsibility. They may think that if there were a too close attendance of Government officials.
- 19323 Q Do you not think that a closer attendance of Government officials would lead to the more efficient management of a colliery? A It would rather have the contrary effect.
- 19324 Q Do you say that the Inspectors are not overworked and have plenty of time in which to perform their duty? A I think so.
- 19325 Q You say that the Inspectors have plenty of time in which to perform their duties, and that they are not overworked? A Well, it depends to most extent on what you regard as their duty.
- 19326 Q I am taking your view of the matter? A I think they have sufficient time.
- 19327 Q And, in your opinion, in the part of the District Inspector every three months sufficient for the colliery? A Under ordinary circumstances I think it is—unless there is something special requiring attention.
- 19328 Q So that you practically exempt the management of a colliery, without any correction of the management, to the Manager? A Yes, he is responsible for the conduct of the mine.
- 19329 Q I suppose you admit that the heating stink, used in the Southern collieries, becomes perforated after about twelve months' use? A If in a dry place, it may last longer, but in a damp place it may become in short condition.
- 19330 Q How long? A Four months, but I think in a dry place it lasts longer.
- 19331 Q What happens to it then, how does it become porous to the air? A The moist atmosphere tends to rot the substance of the stink.
- 19332 Q It goes into holes? A In some cases.
- 19333 Q Mr. Symonds? It becomes like a sieve.
- 19334 Q Mr. Symonds? One man relied it was nothing.
- 19335 Q Mr. Symonds? It is breathing with stink a sufficient means to adapt to those collieries, so should there be breathing with stink? A Well, of course, boards are better. There is not such a leakage. But if the air is introduced to the men by means, I think stink should be in stink.
- 19336 Q Is there any difference in the expense? A Boards would be more expensive.
- 19337 Q Do you know of any boards being used in the district? A No.
- 19338 Q Do you know of any in New South Wales? A Yes.
- 19339 Q Mr. Symonds? Q May I ask where? A In the A. A. Company's No. 177 they are boards.
- 19340 Q Are they used generally throughout the mine? A Oh, every, they have to have stink at the side of the boards.
- 19341 Q No more? Q Do they use breathing as well as the boards? A They require more down.
- 19342 Q What is it, such pipe, or what? A Just ordinary, such boards.
- 19343 Q Mr. Symonds? Q Have there been any tests to prove whether boards are better than heatless? A I do not know of any in this State, but it is generally admitted in the old country, where they use wood, that with boards there is less leakage.
- 19344 Q In a dry mine, would not the stinkage render them in a day or two less efficient than heatless? A I think they are found to be efficient in dry mines when they are used.

(The Examination at 4 p.m. adjourned until 7.15 p.m. on the following Monday.)

MONDAY, 9 FEBRUARY, 1903, 2 p.m.

[The Commission met at the Local Appeal Court, Liverpool.]

Present:—

C. R. R. MURRAY, Esq., D.C.J. (PRESIDENT).

D. A. W. ROBERTSON, Esq., Commissioner. D. FITCHIE, Esq., Clerk.

Mr. Bruce Smith, Barrister-at-Law, instructed by Mr. Ward, Crown Solicitor's Office, appeared on behalf of the Crown.

Mr. A. A. Lynam, Solicitor, appeared on behalf of:—

- (a) the respondents of deceased miners, whether, &c., (relatives of the explosion);
- (b) the employees of the Mount Kemble Colliery (miners, whether, &c.);
- (c) the Miners' Colliery Employees' Association (the Southern Miners' Union).

Mr. G. F. Barry, Solicitor, appeared on behalf of the Mt. Kemble Coal and Oil Company (Proprietors of the Mt. Kemble Mine).

(Mr. J. Garbick, Secretary to the Commission, was present to take shorthand notes of the evidence and proceedings.)

Mr. A. A. STEINBOCK, previously sworn, was further examined as under:—

Cross-examination by Mr. Lynam continued:—

- 18014 Q You said that your theory did not assume an accumulation of gas in the gash? Yes.
- 18015 Q But that gas was a factor in the initiation of the disaster? A That is all.
- 18016 Q Where, in your opinion, did that gas come from? A From the strata above the coal seam.
- 18017 Q In what part of the mine? A From the No. 4 Right.
- 18018 Q The gash? A The gash, up in the strata.
- 18019 Q And when, in your opinion, did that gas come from those strata? A By the fall which took place at the time of the explosion, prior to, and, possibly, after, the explosion.
- 18020 Q Have you any evidence at all that any fall took place immediately prior to the explosion? A Well, we have evidence that the fall, which did take place, was not completed at the time of the explosion.
- 18021 Q But have you any evidence that it had begun before the explosion? A It might not have, supposing the— [Interrupted.]
- 18022 Mr. Bruce Smith: Which do you mean, Mr. Lynam—the 2½ feet that had fallen?
- 18023 Mr. Lynam: That was the work before.
- 18024 Q Have you any evidence that it had not begun? A We have only evidence by the general results afforded by the explosion itself.
- 18025 Q So that your conclusion, now, is based on an assumption which there is no evidence to support? A That is not so. It is based upon all the evidence of force seen in the pit after the explosion.
- 18026 Q Is your conclusion, as to the gas which was an assisting force in the disaster, is based on an assumption which there is no evidence to support? A I do not agree with you there.
- 18027 Mr. Bruce Smith: Does your Honor understand that there is any other class of assumption than an assumption which there is no evidence to support? That is what an assumption means.
- 18028 Mr. Bruce: Not know. It is difficult to define an assumption. I think what is meant is a deduction from the evidence.
- 18029 Mr. Lynam: Q Can you tell me, Mr. Attorney, what evidence there is, from which you deduce that gas came from the mine at the time of the fall? A Well, the indications point to the initiation of the explosion some 15 to 16 feet. I have already pointed out that, under normal conditions, the air in that road could not be expected to contain any inflammable gas, that being an intake roadway, and the evidence, as far as I have been able to make out, that the explosion was initiated there. It would require a certain percentage of the dust in contact with explosion, together with coal dust, and a spark light. These are the grounds for my deduction principally.
- 18030 Q Then were there not other places, such as near to the 4th Left, known since to be giving off gas? A Not that I am aware of.
- 18031 Mr. Bruce: Q Perhaps Mr. Attorney might explain what particular fall the gas came from? A A fall at the gash edge of the 4th Right pillar.
- 18032 Q Is that the one which has been described as the 2½ feet fall? A No, that took place a week before.
- 18033 Q Is it the fall that took place on the day of the disaster that you are referring to? A Quite so.
- 18034 Mr. Robertson: Q Would not the fall produce the gas? A Yes.
- 18035 Mr. Robertson: Then the fall would not derive its aid.
- 18036 Mr. Lynam: That is just what I was going to ask.
- 18037 Q Now do you not see that the more of the gas would be subsequent to the fall? A Part of the coal would fall before the gas was liberated, but the coal would be falling above, and there would be gas accumulated in the strata, which would be forced out by the fall.
- 18038 Q Would the 2½ feet fall a week before the disaster, liberate any gas? A It might, or might not.
- 18039 Q But you not tell me last Thursday, that, in your opinion, it had not? A I said that I had not supposed that there was any accumulation of gas.
- 18040 Q And did I not ask you whether gas would not probably result from the fall of the 2½ feet, and did not you say "No"? A I do not remember what you said and just now.
- 18041 Mr. Lynam: Q On Thursday I put this question: "Not in view of the evidence that the first fall had taken place a week before the disaster, do not you think that the accumulation resulted from the first fall?" And said "No, I could not say that that is very probable." (Papers pp. 180255.) Well now, do you say that it is very probable. I did not say it was very probable. I said it might (Scheme some gas).

19074 Q I ask you now—do you say that it is very probable that gas did result from the first fall? A I say that a little gas, probably, might have been liberated by the first fall.

19075 Q In your opinion, would that little quantity of gas remove in that 35-sec period? A It would go into the highest parts, certainly.

19076 Q Then, is it not probable that, if that gas had been exposed every week, the damp would have been dissipated on it?

19077 Mr. Atkinson: Your Honor will see that that is more a question, a matter of opinion, of all the questions we had on Thursday. We are coming to a very same question that we had then. There or four times, in making over the evidence, I saw that same question asked.

19078 Mr. Atkinson: Particularly that question was asked before, Mr. Knight.

19079 Mr. Atkinson: But your Honor will see that he has now given a different answer, in effect, from what he gave before. The previous answer was that there was not likely to be an accumulation of gas on the gas, now he says that a small quantity was given off by the first fall, and would amount in the highest parts of the gas—that would be an accumulation. Therefore, I am now entitled to ask the question which I asked before, whether it is not probable that, if that gas had been exposed every week, the damp would have been dissipated on it?

19080 Q I think you said that it was probable the gas would remove there? A I said it might.

19081 Q You said it would go to the highest part. Now I ask you: that being so, is it not probable that, if the same had been exposed every week, the damp would have been dissipated on it? A Well, we must remember that the timber was driven out of that place, and that it might be rather questionable our safe to go into the higher parts after the timber was driven.

19082 Q Assuming that you could get in a considerable distance over the 35-sec fall, is it, then, probable that the damp would have been dissipated there?

19083 Mr. Atkinson: That question answers itself, because, really, if somebody had gone in and looked for it, and if it had been there, probably it would have been found.

19084 A Assuming you could get in, and assuming the first damp was there, you would have been able to discover it.

19085 Mr. Knight: I am taking Mr. Atkinson's own "probability."

19086 Witness: I will, I think you sometimes twist it a little bit, Mr. Knight, to suit your own purpose.

19087 Mr. Knight: Q Now, taking your assumption of the fall landing out a certain quantity of gas, would not the gas be liberated subsequently to the fall? A Do you refer to the little gas on the top part of the gas, which has been referred to?

19088 Q No, I am asking now to the gas which you say was an ordinary issue in the disaster? A Well, of course, another portion of the gas would require to be—[Interposed.]

19089 Q Just take the first part of the question, you can put that in afterwards,—would not the fall of the coal be before the liberation of the gas? A I cannot answer that with "yes" or "no." It requires some explanation. The coal would break on the top of the gas and above that there might be a pocket, or a certain quantity of gas under pressure—but the coal goes above that would fall, and would continue to fall for a long time. From the fracture of the fall at that point, there is a long way up.

19090 Q And did it appear to have been a series of small falls like that? A No, I think it appeared to be a very large fall.

19091 Q One very large fall, do you say? A I cannot say whether it was one very large fall or not.

19092 Q Well, apparently, one very large fall or a series of small falls? A I could not say that, it is quite impossible to say.

19093 Q Now, is it not essential, for the maintenance of your theory, that it should have been one large fall? A No, I do not think it is.

19094 Q Do not you see that, if there were a series of small falls, there would probably not be sufficient to free out any quantity of gas? A I do not think that is a correct assumption at all.

19095 Q Then, do you think that any small fall in that gas would have forced out any accumulation of gas? A Any small fall, that is so minute that one cannot give an answer to it.

19096 Q What is indefinite? A Well "any small fall." If you mean of some size, I do not think it would have that effect.

19097 Q You have been speaking yourself of "small falls," and I have adopted your own words? A Well, I say that I do not know whether it was one large fall by itself or more, and it is impossible to say.

19098 Mr. Atkinson: Q Would it not want to be a large fall to drive it through those down and so to the outside air? A I think it would.

19099 Mr. Atkinson: When you speak of "large," it is as well for you to distinguish between large in area and large in thickness of roof. Of course, there is a natural difference between the two? A Well, I think that the area which was open, so far as we have it in evidence, was 8 acres square, and the evidence at the face of the fall, seeing it after the explosion, was to show that the fall went up a long way above the men.

19100 Mr. Atkinson: Q Do you think it would require the whole area of the fall to drive the gas right above the return airway, to destroy those down, and to drive the gas on to the main drift? A Well, I think it would require the greater part of that area, certainly.

19101 Mr. Knight: Q Well, now, if that is your opinion, what becomes of your suggestion that there may have been a series of small falls successively liberating gas, if you now say it would require a big fall to do what you suggest? A Well, of course, I was not over to me what I have previously said, to see if you have put it correctly. You give such long questions that it is impossible to remember—[Interposed.]

19102 Mr. Atkinson: Your Honor will think Mr. Knight says, "As you have said and assumed." Well, it is fair that he should read that "do and so."

19103 Mr. Atkinson: I do not think it is material at all what Mr. Atkinson has said previously. What the Commission wants to hear is what he thinks, after he has heard the evidence, and after he has had time for reflection.

19104 Mr. Atkinson: I think your Honor will rule that if Mr. Knight adheres to the fact Mr. Atkinson with what he said before, he ought to read it and not to paraphrase it himself.

19105 Mr. Knight: Q I think you remember what you said three minutes ago? A Yes.

Witness—A. J. Johnson, 3 February, 1935.

14007 Q. It was not last Thursday? A. No.

14008 Q. Do not you remember what you said a few minutes ago—that a series of small falls would be likely to blow in the gas? A. I think my evidence might be good.

By his Honor the court, Mr. Roberts then read from the shorthand notes the following portion of Mr. Johnson's evidence—

"Q Now, taking your assumption of the fall having cut a certain quantity of gas, would not the gas be liberated subsequently to the fall? A. Do you refer to the little gas in the top part of the roof, which has been referred to?"

"Q No, I was referring, now, to the gas which you say was an inventory factor in the disaster. A. Well, of course, another portion of the roof would acquire to— [Interposed]

"Q And take the first part of the question—you say that in afterwards. Would not the fall at the roof be below the liberation of the gas? A. I cannot answer that with 'Yes' or 'No.' It requires some explanation. The roof would break at the top of the gash, and where that break might be a pocket, or a certain quantity of gas, under pressure, but the roof again above that would fall, and would continue to fall for a long time. From the evidence of the fall at that gash edge, it was a long way up."

"Q And did it appear to have been a series of small falls like that? A. No, I think it appeared to be a very large fall."

"Q One very large fall, do you say? A. I cannot say whether it was one very large fall or not."

"Q Was it, apparently, not very large fall, or a series of small falls? A. I could not say that. It is quite impossible to say."

14009 Mr. Bruce Smith | You can be did not say it was a series of small falls

14010 Mr. Johnson | Q When you said that it might continue to fall, did you mean a series of small falls? A. Well, I do not see that you would call it a series of small falls while it was really a combination of what I have already said would probably be a large fall.

14011 Q Then this is clear, that you told Mr. Robertson that you thought it was a large fall that forced out the gas? A. Yes.

14012 Q Now, I ask you, as the continuing of the roof to fall—these continuing falls—would be after your large fall, where was the gas to be then the large fall had to force out? A. I do not understand you.

14013 Q Where was the gas that the large fall had to force out, when your continuing falls would, by after the large fall? A. Well, we know that it is very common for large falls to force out quantities of air, and sometimes to break down stoppage and doors—one has heard of that, and I am only suggesting something similar.

14014 Q Now, you suggested that the gas came out of that gash, and was forced out by the large fall? A. Quite so.

14015 Q Now then, I say, do you now say that, whenever it is clear that the gas coming from these continuing falls would be after the large fall— [Interposed] A. A continuing fall is still one fall, after all. It is all part of the same.

14016 Q Do you mean to tell me that the gas that sustained the explosion came from the continuing fall after the big fall? A. Well, I mean to say that, in my opinion, I think that the gas was forced out by that fall.

14017 Q Now, I wish to know, do you still mean that the gas was forced out by the big fall?

14018 Mr. Bruce Smith | The does not jar me there. He said so just now. His mind it was continuous.

14019 Q Mr. Johnson | Q Let us clearly understand it. Do you suggest the big fall from the continuing fall? A. No, I do not.

14020 Q Then, do you say that the continuing fall afforded gas for the explosion? A. Yes, part of the one big fall.

14021 Q And you say that the continuing fall afforded gas that operated in the last ignition? A. That is not a question.

14022 Q But when did that gas come falling? A. Some time after the explosion, evidently.

14023 Q What do you mean by "some time after"? What is "some time"?—is it days, hours, or weeks, or what? A. Oh, probably within an hour.

14024 Mr. Robertson | What was your question?

14025 Mr. Johnson | I asked him when did he think these falls commenced—for how long after the big fall. He says for probably an hour.

14026 Witness | I said that it would probably come within an hour.

14027 Mr. Johnson | Q Now, when you want to look at that gash, how much of it had fallen? A. How do you mean? Do you mean how much of the two chains were?

14028 Q No, how much is light? A. Oh, you could not get up to the top.

14029 Q Right, was the passage in the 4th Right blocked up by the fall at the gash edge—absolutely blocked up—so could you see over it? A. Oh, you could get on to the edge of the scum.

14030 Q So that what would be known, in general running parties, as "a partial fall" only had taken place after the disaster? I mean, looking at it after the disaster, there had only been a partial fall.

14031 Mr. Johnson | Do you mean by that, Mr. Johnson, that the scum was not quite closed up?

14032 Mr. Johnson | That is always the case.

14033 Mr. Robertson | Q Is not that always the case, no matter how big the fall is? A. Yes.

14034 Q There is always a scum at the edge? A. Yes.

14035 Mr. Johnson | Q And, that being so, would not the strain there be probably going off free-dump when you tested the fall? A. Oh, if there was any free-dump, it would be right up at the highest parts, where we could not get to it, it would be quite impossible to get to it.

14036 Q Now, have you any evidence at all that, before the big fall, there was any gas accumulated in that 28 inch waste? A. No, I have not heard of any.

14037 Q And now, what evidence have you that, after the explosion of the gas given off or liberated by the big fall, and subsequently by the continuing falls, there was any gas there? A. By careful examination I was not able to find that gas afterwards.

14038 Q Perhaps you have misunderstood the question? What evidence have you that, except the gas given off by the big fall, and the continuing fall thereafter, there was any gas there to be forced out?

14005 Mr. Barry | Your Honor, is there any evidence that gas was given off by the fall? Is it not only a theory?

14006 Mr. Lyngby | The whole thing is a theory. I propose to show that there is nothing to — [interrupted]

14007 Mr. Brown | Will Mr. Garlick please read that question for me?

14008 (Mr. Garlick then read Mr. Lyngby's question as follows:— "What evidence have you that, except the gas given off by the big fall, and the continuing fall, therefore, there was any gas there to be blown out?")

14009 Mr. Brown | Does your Honor understand that question?

14010 (Witness) I do not understand it. I will tell you that, after carefully considering, after the explosion, I was not able to find any gas.

14011 Mr. Lyngby | You were in that big fall before you got up, and I have already pointed out to you that the gas must be there to be forced out. Where was that gas? A. It was in the shaft.

14012 Q That would be blown subsequently to the fall? A. Yes, as we go on, I do not.

14013 Q What do you say? A. The whole thing comes together—the gas and the fall. I do not see how you can separate them in the way you desire me to.

14014 Q Then the gas, that you say was a factor in originating the disaster, was liberated by the fall, and forced out by the big fall? A. Yes.

14015 Q Would it not be quite probable that the first fall, a week before, would have liberated gas and forced it out? A. Well, I think I have already said that there might be a little gas liberated.

14016 Q But would it be just as probable? A. No, because on that occasion only 5 feet or 2½ feet of the roof had fallen.

14017 Q How much had fallen at the big fall? A. You could not tell, you could not see up.

14018 Mr. Brown | Q You might give us an idea? A. Well, it might be 30, or 40, or 50 feet.

14019 Mr. Lyngby | Q And it might be only 4 or 5 feet? A. Oh, it would be more than that.

14020 Mr. Garlick | Q If the gas was liberated by the big fall you speak of, would not that big fall close the opening to the 4th Right roadway? A. You mean, would it get down to the roadway?

14021 A. The evidence goes to show that a fall of 2½ feet took place down in the 4th Right. A. In the place?

14022 Q Yes? A. Yes.

14023 Q Well, if the big fall took place subsequently to that fall, would it not fill up the 4th Right altogether? A. Yes, but the gas would get out.

14024 Q Do you seriously think that the gas that was liberated by the fall would get out? A. Certainly I do.

14025 Mr. Brown | Q Would not that be rather the gradual liberation of gas—the escape of gas—than what you say took place, that is, the forcible expulsion of the gas coming from the 4th Right, as it came from the burst of a gas? A. I do not suggest anything like that.

14026 Mr. Lyngby | Q The doors were blown away? A. It was a 5 ft mine door, not even a wooden door, it would not require very great force to do that. It is frequently taken place in Rock to blow down a brick work stoppage, and sometimes, sometimes, it blows men off their feet, and to those that about. We have other instances of that sort of thing.

14027 Mr. Brown | Q But that is when a fairly large area of roof falls almost in one place, is it not, driving the air down into it? A. Yes, generally speaking, it would require a pretty large area.

14028 Q Not a large area, as it says, but coming down with a rush? A. Yes.

14029 Mr. Reynolds | Q Do you see that before the blast reached the doors, it would have an outlet by the return airway, which branch is both down? A. Yes.

14030 Q So, I take it, there must have been very considerable force to blow out those doors, seeing that it had that relief before reaching the doors? A. Yes, although not, perhaps such as Mr. Brown put it, like a blast from the burst of a gas.

14031 Q Well, that is only metaphorically speaking? A. Yes, I understand that allusion.

14032 Mr. Brown | Q It is not that the explosion was like that of a gas, but, still, the gas must have been very suddenly forced to blow down the doors in any way? A. Yes.

14033 Mr. Lyngby | Do I understand you to mean that the gas which would be liberated by the large fall would come out simultaneously with the air which was under the fall? A. Yes.

14034 Q Is that quite consistent with what you experience in practice? A. I think it is.

14035 Q Is it not rather the practice for the gas liberated by the fall to come down afterwards, after you get out? A. Well, if it was a very, very small fall, but, if it was a sudden fall, and a very large fall, as I have suggested, I think it could be forced out with some force.

14036 Q Then, if the fall came down over a vast area, together, and closed up the opening to the 4th Right, how was the gas from the latter part of that fall to get out at all? A. It would not close up to prevent gas getting out.

14037 Q Was it not closed up completely when you saw it? A. No.

14038 Q How far was it from closed, then? A. Well, you could come up the stairs at the edge of the fall, and get some feet above the level of the top of the mine? A. Yes.

14039 Q Do not you think that, after the fall had fallen, then, the gas which would be liberated by the falling would get up top, instead of coming down to the bottom to be forced out? A. Well, I think it has been forced out.

14040 Q Do not you think that would be a probability, that the gas from the breaking up of the woods would ascend, and would not, as a matter of fact, feel the effects of the explosion at all, caused by the fall? Do not you think that there would be a tendency to draw back to draw the gas upwards, by the pressure of a vacuum, through the fall taking place, do not you think that would be a kind of rebound, drawing it upwards? A. Well, with the roof falling above that gas, it would force the gas out.

14041 Q Well, I take it, that, after the big fall you speak of, there must have been another fall? A. I do not separate them, I cannot separate them. I think it is impossible to think the large fall that took place forced that out.

14042 Q You tell us that you could get up several feet above the fall, when you saw it after the disaster? A. Yes.

14043 Q Now, did you see anything to indicate that there had been two large falls after the 1½ feet fall? A. I do not think I have suggested two large falls.

Witness—A. A. Rasmus, 2 February 1936.

14025. Q I am asking you now, did you see anything to indicate that there had been two large falls? A I could not say, really; it is too probable to say.

14026. Q Now, supposing that the big fall was made of old Missouri gas, and that it did ascend, would it not require some other very considerable fall to force that out, assuming that it did ascend? A Assuming that it did ascend, it would require some more falls to force it out.

14027. Q Do not you think it is impossible to think that it would ascend, the specific gravity of gas being very low, do not you think it is very likely to ascend, and fill up the vacuum caused by the fall, rather than to be forced out by the fall? A It would, naturally, if the fall was not sufficiently great to force it out.

INTERROGATION

(On resuming, Mr. W. H. Pratt attended to take Stenographic Notes of the Evidence and Proceedings).

Mr. A. A. RASMUSSEN, previously sworn, was further examined as under—

14028. Q There would be a vacuum? A I do not suggest it.

14029. Mr. Rouse? Q I think it that the first thing would be that the force would tend to create a vacuum, assuming the absence of surrounding gas and air, it would be an absolute vacuum—if such a thing were to be. The tendency would be for all the gas to be drawn into the space that had been exhausted. Above at the bottom of the fall, as it were down, there would be compressed, and that compression would have the effect of driving the gas from under it. That would be the driving out of the gas.

14030. Q The only line along which the force could escape would be the 4th Right. If the gas were there, it would in that space part, which again by being a vacuum, where a the tendency for the gas to come out with the air is very large quickly? A The tendency without any fall, and without any other cause, and under natural conditions, would be for the gas to rise, but if the real fall and assumed to fall, I think the gas would be forced out.

14031. Mr. Rouse? Q The sequence of events, as you put it, was that there was a fall, then that the gas was liberated, then another fall, and then forced the gas out. Right the first fall would knock up the entrance or the outlet to some extent, and would not the pressure be gas escaping? A It would not knock it up sufficiently to prevent the gas being forced through.

14032. Q Would it not knock the outlet in such an extent as to prevent the gas being forced out with any great violence? A I do not think that it would.

14033. Q I understand you to say that there was a fall, that the gas was liberated, and that then there was another fall? A It was all continuous really, I do not suggest that there was any interval between the falls.

14034. Q I realize that I cannot see how the gas, if as you suggest it was in the storm, could have been forced out with any great violence. Of course, I can see that the fall would not knock up the entrance sufficiently to bottle up the gas, but it would knock it up sufficiently to prevent the gas coming out, as it would be like a dam. A These dams were only there down.

14035. Q But still, the action always was continuous? A Yes.

14036. Mr. Rouse? Q There is, say, a 25 foot fall, and a space is left, there is a further fall which shows the gas to escape, and then there is another fall, or series of falls, but there must be a space left, or there could not be further falls. I want up there and see the space, and Rouse was above me.

14037. Mr. Rouse? I think you must be wrong about that place. We are taking the 4th Right.

14038. Mr. Rouse? I am only talking about the principle.

14039. Mr. Rouse? What takes place in one fall has nothing whatever to do with what takes place in another.

14040. Mr. Rouse? I was there a few days afterwards, and I could only just wriggle my way in.

14041. Mr. Rouse? Q You have heard the first fall described as a light one, being, probably, about 25 feet, you have described your fall as being a large one, and certainly the area would be thicker than 25 feet, probably 4 feet? A I cannot tell.

14042. Q What would you regard as the thickness of the storm in what you call a heavy fall? A I cannot say. The fall may have gone up 30 or 40 feet, the whole thing is continuous, I do not see how you can separate it into a number of falls. It is all one fall.

14043. Q You said that you could get on top of it yourself—it could not have gone up 30 or 40 feet? A I could not get on top of it.

14044. Mr. Rouse? Q You were along the edge? A Yes.

14045. Q Would it be 2 feet thick at the entrance? A I do not know how you can differentiate the thing. If the first fall was 25 feet, when it fell afterwards it may have gone up 30 or 40 feet.

14046. Q You say that there must have been a first fall and a series of falls afterwards? A I cannot separate it.

14047. Mr. Rouse? Q Would it fall in an hour? A Mr. Knight asked me a question and desired me to say how long after the explosion was it probable that the fall would come. He wanted to know whether it was days or weeks, and I suggested it would probably come within an hour.

14048. Q Would it not take an exceedingly heavy fall to create the force which the evidence has disclosed—to displace down—and not a colossal drift in an hour—would it not require some great force taking place at once? A Yes.

14049. Q You say that you think the fall lasted about an hour? A I do not think it is fair to put it down as lasting an hour. Mr. Knight put it to me—how long after the explosion did I think it was before the fall ceased. He wished me to express an opinion on what was it within an hour, and having said that I said that it may have been very much within an hour.

14050. Q We are taking it that it is your opinion that the first heavy fall would liberate a lot of the gas which you speak of, the gas in this vent out by some subsequent fall, or by that continuous fall? A It is all part of one continuous fall.

14051. Q Then you say that there was one continuous fall, and that would give force enough to send out the gas which was liberated? A I think so.

14052. Q Have you ever seen anything of that kind before? A I have seen falls liberate large quantities of gas, I cannot say that I have seen falls knock down brick sloppings, but I have read of it, I have also read of its knocking men down.

14053. Mr. Knight? Q Were not the stones on the edge of the gas falls clean, showing that they had come down after the explosion? Q Well, I have sufficiently explained that before.

14126.

14106 Q If the stones which fell on the edge of the gas were quite close, does it not indicate that there had not been a very long fall before the explosion? A I do not think it does.

14107 Q Would it show that the stones had not been a fall of 20 feet before the explosion? A Well, it shows that the fall did not come until about the explosion.

14108 Q That is the fall of stone which you would see at a height of 8 feet above the edge of the gas?—were not all these close stones which you said? A They were close stones as far as we could get up.

14109 Q At the edge of the gas? A Yes.

14110 Q So that the fall which liberated the gas could not have been 20 feet high? A I expect my that.

14111 Q Is it not clear that the fall which liberated the gas could not have been 20 feet high? A Well, it was all one continuous fall.

14112 Q It could not be 20 feet high? A I say it was all part of one fall.

14113 Q Where you say the close stones were only 8 feet from the face, the gas must have been forced up before that 8 feet of stone fell? A I do not know that I need suppose about 8 feet of stone.

14114 Q I ask you could you see the stone? A You could see a few feet above the top of the steam.

14115 Q The steam was 6 feet 8 inches I think? A I should say it was 5 feet or 6 feet.

14116 Q A few feet above that you could see close stone? A Yes.

14117 Q For how high, 8 feet? A For it is 9 feet.

14118 Q You saw close stone 9 feet from the face—did not that indicate that these stones had come down after the explosion? A It indicates that the fall did not finish until after the explosion.

14119 Q It indicates that these stones fell after the explosion? A Yes.

14120 Q Then here, the fall of stone which forced out the gas was not more than about 8 feet? A I do not think that that is a correct deduction, because if you go further up you might find a fall of stone which came from a greater distance.

14121 Mr. Stevenson Q These stones ran down a slope? A They usually do come down in that way.

14122 Q They fall a slope? A Yes.

14123 Q To discover a few feet of stone on the outside would be no criterion as to the appearance of the stone a few feet in the fall—the answer as the outside might slide down from the top? A I think we could see a foot or two in and they were close.

14124 Q The fall naturally succeeded to an apex, and these stones might have tumbled down the slope from the top? A Yes.

14125 Q You might find close stones on the outside of the slope which were not of the same character, or the same stream as those inside the fall a foot or two? A Well, of course, the stones might have fallen from a higher point.

14126 Q That is what I mean—they might have fallen from a higher point? A Yes.

14127 Mr. Stevenson Q Hoping that these stones, which you saw in the slope of the gas—did they appear to have come from a higher point? A No, I did not say that they did. They seemed to have come down pretty straight to the edge of the gas.

14128 Q Your opinion is, that these stones, which you saw were not stones which had come down from a higher point? A I would not say that.

14129 Mr. Spence Q It is clear that these big stones which were close fell after the explosion? A Yes, that is the deduction.

14130 Mr. Stevenson Q Would it make any difference if these stones were on a dead end? Would it make any difference in the deposit of dust if these stones were on a dead end? A The evidence is that it is not as you get the greatest deposit of dust.

14131 Q There might be a cushion of air that could not be reached by the force? A We have it as record that the most coal dust is usually found in those blind ends.

14132 Q There might be a cushion of air there, would not that tend to protect these stones? A No, it is contrary to all experience.

14133 Mr. Spence Q How far up is the natural stream from the top of the steam do you expect to find gas? Would the gas be mostly in the first few feet and then less and less as you go up, or would it be otherwise? A That is rather a difficult question to answer. I would say that as gas generally comes from the steam and it is probable that it would be found nearer to the steam.

14134 Mr. Stevenson Q Have you any knowledge of gas being found in the strata overlying the coal? A Do you refer to any particular district?

14135 Q Take Kentucky? A I have not heard of it in Kentucky, but I have heard of it often enough in other places.

14136 Q Anywhere in the Colony? A Do you mean about the seam?

14137 Q Yes. A Of course it is occasionally I should say high.

14138 Q Is the gas which is naturally in the strata, as does it tend to rise there by the sucking of the roof? A It tends to be naturally contained in the strata. In some cases tends to come out of the roof.

14139 Q Have you heard a report that such a thing has been found on any of the southern collieries? A I do not remember any report in regard to any southern colliery.

14140 Q Is it not a fact that the roof above all the southern collieries is hard sometimes? A It is blue shale, grey sand, and sandstone.

14141 Mr. Spence Q That is not a cover that, in your opinion, would contain inflammable gas? A I beg your pardon.

14142 Q You say that the southern strata above the seam does not contain inflammable gas? A I told Mr. Robertson that as far as I know I had not heard of any liberation of gas from these strata.

14143 Q Do you know, in the southern district of any strata which has gas in it? A I think it is quite possible.

14144 Q Have you any evidence to have that occurrence on? A I cannot say that I have.

14145 Q You have made the statement here that the strata in Kentucky probably had gas in them? A I have known of them strata being broken, but not in the south.

14146 Q That is what I want to bring out. You have been to the evidence that the strata above coal in Kentucky contained any gas? A No, there has no case come before me.

14147 Q You cannot support the statement that the southern district strata, above the coal, contain gas by quoting any instance as proved? A No, I do not think I can.

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14144 *Mr. Bruce Smith* Q There is no evidence in the northern district? A I am speaking of the southern district.

14145 *Mr. Lynch* Q Speaking specifically of Knoxville—although you have no evidence that the Knoxville strike, where the coal, amounted any gas—although you can give no instance of the strike in the south and district containing any gas—is not your theory that the disaster depended on the strike containing gas? A Yes.

14146 Q Now, will you show the Commission any justification which you have for assuming that the strike above the coal at Knoxville sustained inflammable gas? A I have none of course. In one case, which I can point to particularly, gas had not been seen in the district for some years, but it was liberated from the roof of a mine and I think it killed two boys. That was on a main strike away.

14147 Q Where? A It is recorded in the *Imperial Engineers' Report*.

14148 Q That is interesting, that happened in another part of the world? A Quite so.

14149 Q Do you tell the Commission, secondly, because in some reports about a colliery in another part of the world, there is a case where a stratum was known to give off inflammable gas and because of this you say that gas would be given off by the stratum above the coal at Knoxville? A I am only dealing with the results of the explosion.

14150 Q I want to keep the issue down to that of inflammable gas above the coal at Knoxville. Show me anything that you have that will support gas in assuming that there is gas in the stratum? A I have already told you that I have no evidence of it.

14151 Q Now you tell me that your assumption that the gas in the disaster came from the stratum—where you say you can never know to contain gas—is much weaker than the assumption that it came from the coal? A The latter requires to be considered in accordance with all the results of the explosion.

14152 Q Was not the evidence to the effect that gas had been given off by the top heading, which had not been ignited, in accordance with the results of the explosion? A The evidence is that I found some gas after the explosion, and the evidence is that some flame went down the back heading, which blew out the stoppings and which forced a flame near to the 24th Right, towards the 24th Right.

14153 Q If you have had no evidence of the gas in above the coal, notwithstanding inflammable gas, but have had evidence to show that the action of coal was actually giving off gas, is it not fairer to assume that the explosion originated from gas given off by the coal, than from gas given off by the strata? A We must look to the results of the explosion, to see where the explosion originated, and in my opinion it did not originate at a point where you say the gas was given off.

14154 Q Now I have a positive statement from you, that your opinion now is that the back heading, near Main's place, was not the original seat of the disaster? A I have already stated it.

14155 Q You suggested that there is Wallasing, but you say absolutely absolute it? A Yes.

14156 *Mr. Bruce Smith* It has not been found, but now it is positive of the thing?

14157 *Mr. Lynch* Q Do you absolutely find that? A Yes.

14158 Q Do you remember telling me at Wallasing, that any further inspection which you might make would throw no further light on the position? A Yes I said so.

14159 Q Will you tell me what additional facts you have got that made you abandon the theory that the disaster originated near Main's place? A The plan which has been prepared by the officers of the Mines Department contains evidence which, to my mind, is reasonable.

14160 Q Did you not know that evidence before? A No.

14161 Q Did you not see a plan with evidence of force marked on it? A The plan was then being made.

14162 Q But you had your own notes? A I had my own notes.

14163 Q Then the plan was made from this evidence? A The officers noted the mine and prepared the plan themselves.

14164 Q Is that plan prepared from their own observations? A Yes.

14165 Q Then it is their evidence which we are taking and not yours—their evidence of force? A I do not know what you mean by these evidence of force.

14166 Q I mean, was the plan prepared from their own observations? A The plan has been prepared from the results of their observations, and I have been able to see the plan.

14167 *Mr. Bruce Smith* Q And they measured the distance? A Yes.

14168 Q And they set your notes to guide them? A No, they took their own notes in the pit.

14169 Q Then this plan, which you now say you altered your opinion, could have been prepared by any two mining surveyors? A I dare say it could.

14170 Q So in using surveyors might have shown evidence of force in one place and none in another? A Not if they did it accurately.

14171 Q There it would depend on the accuracy of the man? A And on the honesty of the man.

14172 Q Was anyone present to point out things to the men who prepared the plan? A Some of the people from the colliery would be there.

14173 Q So you can't think that certain evidence of force might have been pointed out, and of the plan was not checked, certain of the evidence might have escaped their notice? A Yes.

14174 *Mr. Bruce Smith* Would it not be better to take the witnesses who prepared the plan as the authority?

14175 *Mr. Lynch* I do not think it is of any use cross-examining Mr. Atkinson on this matter.

14176 *Mr. Lynch* Q The plan shows the position of Indian which had been burned for weeks—how were these men to put on the plan the position of Indian which had been burned for weeks? A They are put on the plan as the reported position.

14177 Q Reported to whom? A They will be able to explain that.

14178 *Mr. Atkinson* Q Does this plan show all the evidence of force which you noted? A Yes, and a great many more.

14179 Q Does it contain the whole of it? A I could not say whether the plan contains all of it. It contains the material portion, and, I should think, a great deal more information besides.

14180 *Mr. Atkinson* Q From your seat, have you got any further information as to the direction of force? A I cannot say that I have.

14181 Q Did you get any information from the colliery officials relative to the mine when you visited the mine with Mr. Smith? A There may have been one or two things, but I do not think there was anything material.

14195 Mr. Webster: When I rented the same with the Chamberlain I got a great deal more information than I got formerly.

14197 Mr. Lyndell: Q You take that plan as your final guide, in putting your conclusion, and first plan reduces the evidence of force—all the evidence of force—which you yourself noticed? And I do not have a better idea?

14198 Q Is that it? Is it?

14199 Q And it also contains a lot of evidence of force which you did not notice? And Will, it makes the thing clearer?

14200 Q It shows a lot of additional evidence? And it contains further evidence.

14201 Q Further evidence of force which you did not notice? And Yes.

14202 Mr. Lyndell: Q Have you got the plan here? [To answer.]

14203 Mr. Bruce Smith: They will be produced by the witness.

14204 Mr. Webster: It might have been well to have them put in, as that Mr. Adams could have given evidence upon them. Why not call the witnesses, and have them put in formally?

14205 Mr. Bruce Smith: I do not know whether I shall call their names before the Managers have given their evidence.

14206 Mr. Webster: These witnesses are valuable in connection with Mr. Adams's evidence, because his evidence depends upon the suggestion that the plans are accurate.

14207 Mr. Bruce Smith: What Mr. Adams intended was, that there were two points which he thought might be treated as the source of the trouble, but, when he saw the plans, the source was brought before him as that he could reduce it much more fully, and that decided him which of the two theories was the right one.

14208 Mr. Webster: Mr. Adams is continually speaking of plans, but they are not put in evidence.

14209 Mr. Bruce Smith: If I brought these plans into Court now, I would give a tremendous bundle to the witnesses called on behalf of the mine. I do not propose to produce the plans at the present time—until after the whole of the witnesses on behalf of the mine have given their evidence. I will produce the plans then.

14210 Mr. Lyndell: That will raise the necessity of Mr. Adams's going into the box and explaining them.

14211 Mr. Bruce Smith: Mr. Adams has reserved to himself the right of giving any evidence he may desire to rely on the Managers. I have proposed to produce these plans. We have formulated a theory. One theory was given in the language, and we now state them and say that, as the result of having the whole of the evidence of force read and prepared on a plan, Mr. Adams can attribute the disaster to one cause. It was for that reason, to let the Jurors know in and say what their theory is. I anticipated they proposed a theory altogether different from that of Mr. Adams. When they have propounded their theory, I will give them mine, and allow them to see the plan.

14212 Mr. Webster: I want to see to be ready a fair thing that the plan, spoken of by Mr. Adams, should be before the Managers. They ought to be able to see upon what grounds, and upon what foundation, Mr. Adams has based his theory.

14213 Mr. Bruce Smith: The suggestion seems to be that there is a natural obligation upon Mr. Adams to explain the cause of the disaster, but it simply seems here to an expert witness to say "I think so and so." It is the Managers who have to explain the disaster.

14214 Mr. Webster: The Commission simply look upon it that Mr. Adams comes here for the benefit of the public, and is the contents of truth to give his opinion based upon all the facts which he is acquainted with. Amongst other things, the plan is spoken of as being part of the grounds of his opinion, and his evidence is hardly complete unless we have it placed just that as a correct plan.

14215 Mr. Bruce Smith: Surely, if anybody wants into the box to give evidence, he will be able to give the data from which he has drawn his conclusions. I could point out that Mr. Adams is no different from any other witness to the mine. I asked all the witnesses here, "Did you take a single note of anything which you saw on paper," but they all said that they trusted to memory.

14216 Mr. Webster: I will give you one more in point. Suppose this were a question amongst other things of the abundance of a plan, and suppose in trying the disaster the witness says an accident, surely it would be fair to ask that that accident should be produced, to see whether it was correct or not.

14217 Mr. Bruce Smith: My contention is first Mr. Adams has undertaken to come forward and give his explanation of the explosion, but I do not want him to be introduced into the position of the person who is responsible for it. It is after all, a matter of negligence. He says, "This is my opinion, for what it is worth." Let the Managers come forward and give their explanation of the accident.

14218 Mr. Lyndell: I do not think the Managers have anything to say with it.

14219 Mr. Bruce Smith: It is for the management to say what their theory is to explain the disaster.

14220 Mr. Webster: I do not think that that is so. Mr. Adams comes here in a public office, and as much in the interests of the Kentucky Company as of anyone else. If he has any information which is likely to be of any advantage to the Company, it is right that he should produce it.

14221 Mr. Bruce Smith: I do not mean that he should not produce it, but I do not want the Managers to come here and criticize Mr. Adams's plan before giving their own evidence in regard to the matter.

14222 Mr. Webster: I do not see why the Managers should not have the advantage of Mr. Adams's plan.

14223 Mr. Webster: I agree with Mr. Webster, and Mr. Lyndell takes the same view.

14224 Mr. Webster: I think that we ought to have had the plans put in before Mr. Adams came here at all. You went to the fact that Mr. Lyndell was a purely voluntary witness. He has a big responsibility upon him, and he comes here to defend himself as well as the Managers.

14225 Mr. Bruce Smith: There is no defending himself about it, in my opinion. It is simply this—the Commission has to inquire into the disaster, and to decide what the blame lies. Mr. Adams comes here to explain his opinion.

14226 Mr. Webster: As we have a great responsibility resting on him.

14227 Mr. Bruce Smith: I say it is for him to come here and say that he has done his duty, but it is not for him to embark on an elaborate description of the whole thing. He has merely to show that his Department has done its duty. If he explains what he has done himself, and what his Department has done, up to the point that is all that he is bound to do.

14218. *Mr. Fisher* : You cannot prevent our asking him for more information.
14219. *Mr. Bruce Smith* : I say that, as far, Mr. Atkinson has taken a great deal of trouble to meet, and has spent many weeks in clearing facts, and doing work which he was not bound to do.
14220. *Mr. Fisher* : We quite acknowledge that.
14221. *Mr. Bruce* : Therefore we think that Mr. Atkinson may wish to put himself in a right position and may feel disposed to produce this map, which is the foundation, to a certain extent, of the evidence which has been formed, he may feel disposed to have it verified, and open to the inspection of everybody.
14222. *Mr. Bruce Smith* : If the management, through their witnesses, is going to give evidence, they should do it without using Mr. Atkinson's plan. After the witnesses have given their evidence, I do not wish to prevent them from using the plan. I should not, however, that any plan should come in the possession of the Commission, and then they should not be in the hands of the witnesses before they give evidence. I want them to give what I call their positive evidence, independent of Mr. Atkinson's plan. I do not want their having an opportunity of using the plan afterwards.
14223. *Mr. Fisher* : What is the difference between the production of any plan or plans and the evidence which Mr. Atkinson has given here to-day?
14224. *Mr. Bruce Smith* : There is a great deal of difference between the two things.
14225. *Mr. Fisher* : Mr. Atkinson's evidence has been of great value to me, although I have seen and mine myself. Mr. Atkinson has anticipated the matter more than anyone else, and therefore, his evidence is of great importance.
14226. *Mr. Bruce Smith* : And now let the persons on the other side give their evidence irrespective of Mr. Atkinson's data.
14227. *Mr. Barry* : I object to the term "rules"—there are no rules in this matter.
14228. *Mr. Bruce Smith* : Well, you are one side and I am on the other. What I say is, that I think the witnesses called on behalf of the management ought to give their evidence without using that plan. Let them give their evidence irrespective of other people's data.
14229. *Mr. Barry* : Is there any dispute as to where certain boats were found in the mine?
14230. *Mr. Bruce Smith* : The position of the boats is of no importance, because I do not think there is any difference of opinion as to where they were found. But the position of the ships, the heaps of coal, the cones, the wire, and the canvas is a matter of importance.
14231. *Mr. Fisher* : Is there not evidence of that already?
14232. *Mr. Bruce Smith* : I do not think that those people have made comprehensive notes of things.
14233. *Mr. Fisher* : Then why should they not have the advantage of Mr. Atkinson's notes?
14234. *Mr. Barry* : Why should they be allowed to give evidence in the dock to mislead themselves and the Commission by making false assumptions? I have no doubt Mr. Barry, for instance, would be only too glad to see any plan with a general assumption that it is correct.
14235. *Mr. Bruce Smith* : Does your Honor think that those witnesses will come here to give evidence in the dock? Has not each one had ample time to visit the mine, and is it not a fact that they will all come here having taken sufficient evidence to make decisions for themselves.
14236. *Mr. Barry* : Mr. Atkinson found himself in the dock, and now he has half light thrown on a certain matter.
14237. *Mr. Barry* : His officers put him right.
14238. *Mr. Bruce Smith* : I will put the plans in evidence at once, but I would ask you to allow the witnesses for the management to give their evidence in their own way, and on their own data, with the right of using the plans afterwards. In the meantime the plans to remain the property of the Court.
14239. *Mr. Barry* : We think that the plans should be put in, and it will be for the Commission to reserve its decision as to who should be allowed to see them. We shall not allow the plans to become public so as to say, but we shall see our decision with regard to allowing them to be repeated here or anywhere else. One plan is now, in fact, part of Mr. Atkinson's evidence. We shall expect to have these plans produced before the Commission to-morrow morning.
14240. *Mr. Bruce Smith* : Very well, your Honor.

[The Commission, at 4.50 p.m., adjourned until 10 o'clock the following day.]

TUESDAY, 16 FEBRUARY, 1903

[The Commission met at Mr. Lord Appeal Court, Southampton.]

Present:—

O. R. R. MURRAY, Esq., D.C.J. (PRESIDENT)

D. A. W. ROBERTSON, Esq., Commissioner. D. RITCHIE, Esq., Commissioner.

Mr. Bruce Smith, Barrister-at-Law, instructed by Mr. Wood, Crown Solicitor's Office, appeared on behalf of the Crown.

Mr. A. A. Lyngby, Solicitor, appeared on behalf of—

- (a) the representatives of deceased miners, whether, &c., (wives of the employees),
- (b) the employees of the Mount Kemble Colliery (miners, whether, &c.) and
- (c) the Elberston Colliery Employees' Association (the Miners in Mount Thron).

Mr. G. J. Barry, Solicitor, appeared on behalf of the Mount Kemble Coal and Oil Company (Proprietors of Mount Kemble Mine).

(Mr. J. Galsche, Secretary to the Commission, was present to take shorthand notes of the evidence and proceedings.)

Mr. A. A. ATKINSON, previously sworn, was further examined as under:—

14241 Mr. Bruce Smith: These are the plans which the Commission wished to have. There are three of them.

14242 (These plans were handed to the Commissioners, and inspected by them.)

14243 Mr. Bruce Smith: My attention will now kindly come round and explain the sequence of these.

14244 (Mr. Atkinson then went on the bench and explained the plans to the Commissioners.)

14245 Mr. Bruce Smith: Q. This plan and the other two others? A. Cover the same ground.

14246 Mr. Atkinson: Q. On the same scale? A. A different scale.

14247 Mr. Bruce Smith: These plans can be considered to be previously in evidence, and also that plan which has never been in being put on, the compilation plan. (The plan referred to last is one prepared by Mr. Atkinson, and handed to the Commission, on which there are noted the main streets and narrow streets of the mine, the various places of all the men on the mine on the day of the disaster, and the positions in which the bodies of the men who perished in the disaster were found.)

14248 Q. Did you compile this plan yourself, Mr. Atkinson? A. No. It was done under instructions. It is really a copy of this one, information for which I supplied myself. [Referring to a plan which he held in his hand.]

14249 Mr. Bruce Smith: I am afraid there is a difficulty about that. I do not think it is all sworn to.

14250 Mr. Bruce Smith: Q. That is a copy? A. Yes.

14251 Q. A copy made by a draftsman? A. Yes.

14252 Q. And you compiled that yourself? A. Together with a draftsman, from information received from different people and officials, as to the positions. It was not all sworn evidence.

14253 Q. It was not sworn evidence? A. No.

14254 Mr. Bruce Smith: And it is not in sworn, your Honor.

14255 Mr. Bruce Smith: Is there any dispute as to its contents?

14256 Mr. Bruce Smith: As long as it is taken with that honesty, Mr. Atkinson will have no objection to putting it in.

14257 Mr. Bruce Smith: We will take it provisionally.

14258 Mr. Bruce Smith: It can never be other than provisional. I think the officials who prepared that got some of the information from the witnesses at the inquest after the inquest, something affirmative, so, I mean to say, it could never be an exhibit except in that sense, but if the Court likes to take it with that reserve, knowing that it is done with the best intentions in order to put it on the truth as to the positions of the bodies and other things, it may be useful.

14259 Mr. Bruce Smith: The plan might be requested by Mr. Lyngby and by Mr. Barry—I will not say by you, Mr. Bruce Smith, because you have put it in as something correct—I assume you take it as correct?

14260 Mr. Bruce Smith: I do not wish to put it in, but, if the Commission likes to have it, I do not see any objection.

14261 Mr. Bruce Smith: If it is admitted on all hands, by all persons interested, that it is practically correct, then we might take it as correct.

14262 Mr. Bruce Smith: Yes. I mention the reference to the Court now. If the Court like to take it knowing that Mr. Atkinson will be glad to have it in.

14263 Mr. Bruce Smith: So far as Mr. Atkinson himself is concerned, a good deal of it is of his own knowledge.

14264 Mr. Bruce Smith: Your Honor will understand that at the inquest a witness would go into the box and would say, "Well, I do not understand a map well", and yet he would be the position of a body. After he came out of the box, the officials would take him, and would show him, so to speak, on that plan, and get him to point out the position of that body on the plan. Well, that was an evidence at all. It was after the witness left the box, so that it would be after he had left the influence of the Court.

14265 Mr. Atkinson: I take it that the position of each body of the bodies is of very little importance in as it is only the positions of a certain number of the bodies that are important.

14266 Mr. Bruce Smith: That the officials take the bodies as important.

14267 Mr. Atkinson: Yes, but I take it that Mr. Atkinson can swear to the position of the important bodies.

14268 Mr. Bruce Smith: No, because Mr. Atkinson did not see the positions of some of them. They are merely all needed in these on the information received from these officials.

14269 Mr. Atkinson: I certainly did not know the bodies myself, but I would have no hesitation in identifying them from information which I have received since.

14270.

- 14176 *Mr. Hoar* : Q Can you distinguish the information, as to the positions of the bodies, which appears on this plan, and which was given at the Inquest, from what was not actually given at the Inquest but was procured from the witnesses afterwards,—does your plan differ in that? A Yes, I think so, Your Honor, and, so far as the positions of the bodies are concerned, there may be some slight differences—but no material differences, between this plan and the plans which the witnesses worked at at the Inquest.
- 14177 Q You say there really are no substantial differences? A I think not.
- 14178 Q You were present during the Inquest—the whole time? A Yes, I was.
- 14179 *Mr. Bruce Smith* : But I do not think he was present when those things were being put upon the plan.
- 14180 *Witness* : No, I was not present when they were put on the plan.
- 14181 *Mr. Bruce Smith* : I want to see then Mr. Johnson does not give greater weight to it than it is entitled to.
- 14182 *Mr. Hoar* : Q Are there any facts, except the positions of the bodies, that are in this witness' questions in relation to the evidence that was given at the Inquest, or are the other facts—the positions of stones, and wires and tracks, and other things, so they appear on the plan—either your own knowledge, or within the knowledge of witnesses who gave evidence?
- 14183 *Mr. Bruce Smith* : Which is Your Honor speaking of—what plan?
- 14184 *Mr. Hoar* : The completed plan [assuming the plan which was afterwards marked Exhibit No. 25].
- 14185 Q Most of the evidence of those shown on the plan were taken with my own knowledge. There may be some things not on there, and which were not given in evidence.
- 14186 Q But are all that on there, on that plan which you have in your hands, consistent with your own knowledge and observation of what appeared on the ground after the explosion, and before any work was done in removing them? A Well, some few may have been put on from information received, as well.
- 14187 Q As to the position of that wire, which is a very important thing, is that within your own knowledge or not? A Well, I have nothing indicating anything on this plan with reference to that wire.
- 14188 Q What do you say as to the steps,—do they appear on that plan? A No, Your Honor.
- 14189 Q Then, that plan shows, principally, bodies? A And suggestions—does.
- 14190 Q Well, as to those, what can you say of your own knowledge? A I think they are all put on with our own knowledge, those suggestions I don't.
- 14191 *Mr. Justice* : Q Are there any material actions mentioned or noted on these sectional plans—[referring to those which were afterwards put in and marked Exhibits Nos. 25, 26, and 27]—of which you have no personal knowledge? A Oh, yes, there are several things which the surveyors had more time to do and put on, as they were there first or five days.
- 14192 *Mr. Hoar* : Q Did the surveyors take the cases themselves? A Yes, Your Honor.
- 14193 Q And did they take their own observation of those facts, which they put down—physical facts? A Yes, they did.
- 14194 *Mr. Bruce Smith* : Those sections were prepared, almost altogether from the personal observation of those two surveyors who went in and removed those five days.
- 14195 *Mr. Hoar* : Q I suppose it comes to this, Mr. Johnson, practically, that, as to the position of all physical appearances, except bodies, those witnesses were by their own observation? A Yes.
- 14196 Q And as to bodies, of course, they had to take history for that, because the bodies were removed before they went? A Yes.
- 14197 And as to the history of those bodies which appear on the sectional plans [Exhibits 25, 26, and 27] is that or is that not, practically, contained in the evidence given at the Inquest? A I do not understand what Your Honor means from the sectional plan.
- 14198 Q The sectional plan [Exhibit 25] shows bodies? A The one made by the surveyor.
- 14199 Q Those then that were produced to day for the first time [Exhibits 25, 26, and 27], those show the positions of some bodies? A Yes.
- 14200 Q And those positions of bodies could not have been known to the surveyors, except by the narration of some body else? A That is so.
- 14201 Well, was that narration, so far as you know the narration at the Inquest, or a narration made to them afterwards? A To them, when they were in the room, Your Honor.
- 14202 *Mr. Johnson* : It must have been before the Inquest.
- 14203 Q Were not they beginning the plan before the Inquest? A They were busy with it.
- 14204 Q And I take it they would have all that information prepared? A Before the Inquest I do not remember. You could get that from the officers themselves.
- 14205 *Mr. Bruce Smith* : I will call them out.
- 14206 *Mr. Justice* : Q When you are using those plans, you might distinguish, or make clear, those things of which you have a personal knowledge from those things of which you have not a personal knowledge? A Yes, we are referring to those plans.
- 14207 Q Those sectional plans which you produced the other day? A If I might make a suggestion to the Commission, I think that distinction might be given to the surveyors.
- 14208 Q But, in addition to what they know I would like to know, what you know about the evidence of facts on those plans?
- 14209 *Mr. Bruce Smith* : He has given those facts' evidence at the Inquest. He has never mentioned the positions of things, except exceptional ones before the evidence given at the Commission.
- 14210 *Mr. Justice* : It would not take a great deal of time to put directly before the Commission what matters there are of which he has a personal knowledge.
- 14211 *Mr. Bruce Smith* : Would it not be better, if any particular object became important, he has then to be asked, 'Did you see that yourself?'
- 14212 *Mr. Justice* : That would amount to the same thing.
- 14213 *Mr. Bruce Smith* : Yes, but it would involve less loss of time.
- 14214 *Mr. Justice* : Yes.
- 14215 *Mr. Bruce Smith* : I mean, if anything becomes, or seems to you to be, of importance, Mr. Johnson can at any time—he will be under such—say, from the table, 'That is from my own knowledge,' or 'That is not from my own knowledge.'
- 14216 *Mr. Hoar* : I understand Mr. Johnson to say that, so far as his personal observation went, those plans are correct, there is nothing contradicting his personal knowledge.

14080 Mr. Bruce Smith: I will go further, and say that he has no reason to doubt that they are correct.
 14081 Mr. Bruce Smith: Although there is something additional there.
 14082 Mr. Bruce Smith: Although he may have got information in the man, and he has no reason to doubt the correctness of the information.

14083 Witness: No, I have no reason to doubt the information.
 14084 Mr. Bruce Smith: Well, this subject is extremely, and subject to the calling of those witnesses—their coming, however—these plans might be well given [Exhibit No. 35, 37, and 38]. Of course, probably that plan [Exhibit 35] must go on, subject to examination. That, which is a copy of the one which Mr. Atkinson had in his hand just now, seems a little more questionable.

14085 Q. There is no doubt as to this being a correct copy of the one you have in your hand—has been compared it with yours? A. Yes.

14086 Q. And you prepared yours by taking one of the original plans of the man, which was identically correct? A. Yes.

14087 Mr. Bruce Smith: Q. Who made that copy [Exhibit 35]? A. Mr. Martin, the draftsman in the office. Mr. Martin made this one [indicating his own plan, which he held in his hand].

14088 Mr. Bruce Smith: The lithograph copy was shown at the request as being a true copy of the plan of the maps.

14089 Mr. Bruce Smith: The witness is asking about a lithograph upon which the positions of all the men are marked. There is no question about the lithograph being copied from the plan supplied by the man itself, but the witness is asking now about a lithograph upon which the positions of the men are marked, which was originally made by Mr. Martin.

14090 Mr. Bruce Smith: Q. The position of the bodies, as marked on that lithograph, were noted there on the strength of the witnesses given at the request? A. Only partly so.

14091 Q. And also from information supplied by the affidavits in the case? A. Yes.

14092 Mr. Bruce Smith: It is admitted, and must be taken, that at that time nobody had any object in view representing the position of any particular body or any particular thing. The information was given to the best of the knowledge of everyone who attended, and, presumably, it is the best information.

14093 Mr. Bruce Smith: I do not think it would be practicable to get any better; and Mr. Atkinson says he has no reason to doubt the accuracy of the whole of it.

14094 Mr. Bruce Smith: And I think the Commission might think there is no doubt of it, generally. I think it might go on, subject to any testimony, at once, as presumably correct.

14095 Mr. Bruce Smith: It can go in for what it is worth.

14096 Mr. Bruce Smith: Just so.

14097 Mr. Bruce Smith: I will give you an instance of the difficulty. In the case of Henry's body there were only two witnesses who spoke as to the relative positions of the body and the head. One—Morris, I think—says that as far as he could remember, the head was on top of the body, and Fred Jones swore that the head was on top of the body. Well, they are the only two witnesses who spoke as to the relative positions of those two objects.

14098 Mr. Bruce Smith: And as to the sectional plan, I notice that the head is left out.

14099 Mr. Bruce Smith: And the same too.

14100 Witness: The same was taken by a position which was marked on a stone.

14101 Mr. Bruce Smith: I suppose there was no question about the arm or that there was more accuracy about its position.

14102 Mr. Bruce Smith: Q. Was there any conflicting evidence given with regard to the position of the arm and the body? A. I think that there was conflicting evidence with regard to that as well as the head, I am not sure.

14103 But witnesses of that head are very few. I think there are only two or three.

14104 Mr. Bruce Smith: And they are not very material, because it is not possible for any wheeler the man would be taken off his head or the head taken off the man.

14105 Mr. Bruce Smith: No, and I should think that the head would come off the body by striking against some thing, out by being thrown off.

14106 Mr. Bruce Smith: So I think we may take it that these plans are, presumably, more for what they are worth.

14107 Witness: Might I ask whether there is any objection on the part of the Commission to have any reduction of the plan? Or have you all think of it before the Supreme Court?

14108 Mr. Bruce Smith: By all means. We will have to have this large one made given reduced, and the other will have to be reduced, too, first, for the purpose of printing, but it will not do to make that at once, because the plan would have to be away for about a week. We will go on now with Mr. Atkinson's cross examination.

14109 [A map showing the results of the explosion is put on part of No. 1 man level rope and, Messrs. Kimble, Messrs. Wain, were put in and marked Exhibit No. 39.]

14110 [Two sections, showing the results of the explosion is part of No. 1 main level rope road, Messrs. Kimble, Messrs. Wain, were put in and marked Exhibit No. 39 and 40.]

14111 [A lithograph plan of the Messrs. Kimble, Messrs. Wain, on which the positions of the working places and the positions of the men who perished in the disaster are shown, was put in and marked Exhibit No. 39.]

Cross examination by Mr. Lyngby —

14112 Q. Which is the plan that you are using to base your theory on? A. Well, the plan that I referred to yesterday is here.

14113 Q. Do not you say that that is not an answer to my question?

14114 Mr. Bruce Smith: It is hardly fair to say "Which plan are you using to base your theory upon?" but you might say, "Which plan did you use, which plan did you look at, before you concluded that your theory was the correct one, or before you forced that theory?"

14115 Mr. Lyngby: I understood, your Honor, that some of these sectional plans are merely a duplication of the one by you.

14116 Mr. Bruce Smith: Mr. Atkinson says you remember, that he had a stroke after, and then afterwards he got all these facts explained clearly before him, so that he could look at them and study them more carefully.

Witness—A. A. Atkinson, 10 February, 1935.

14146. *Mr. Egan* | That is the plan I want.
14147. *Mr. Moore* | And then he came to another conclusion—he did not come to a different conclusion, but he modified his first conclusion.
14148. *Mr. Bruce Smith* | In this report, I understood Mr. Atkinson to say, originally, that he was in doubt between two points; and now he says he thinks the evidence preponderates in favor of one; but there is nothing "absolutely certain" about any one of them—it is mere expert opinion.
14149. *Mr. Egan* | Q. But I suppose you say that you have no doubt now that the theory of the back leading having been the original seat of the disaster was erroneous? A. No, but my opinion has been strengthened that the 4th Right was the source by investigating the plan.
14150. Q. And that opinion is without any doubt in your mind? A. Well, there always are doubts.
14151. *Mr. Moore* | Mr. Atkinson does not say that, Mr. Egan. Mr. Atkinson must be taken to say—he must say—that there is no absolute certainty about anything of the kind. There never can be.
14152. *Witness* | I just give it as my opinion for what it is worth.
14153. *Mr. Egan* | Q. The plan where all those things were condensed for you, and which you looked at and on which you finally fixed on the mechanism—what is that plan? A. That plan has [indistinct] Exhibit No. 35.
14154. Q. This is what I want to ask you: What new matters did those optional plans [Exhibits Nos. 26, 27, and 28] show you that confirmed you in this theory? A. Oh, there are several things which are shown more plainly when you get them on to a plan and are able to look at it.
14155. Q. I ask you what new matter? A. Well, there is one piece of evidence particularly with reference to the telephone wire.
14156. Q. What was that? A. And another piece with reference to a telephone wire in a hole near to the 4th Left; and generally the appearance as indicated on the plan, of some of the tube and some of the coil—those are the principal things, I think.
14157. Q. But in what way did the new matter concerning the telephone wire support this theory? A. It is indicated to me that the frame had gone in only.
14158. Q. Anything else? A. Not an answer to that question.
14159. Q. No more new matter, then, at far as either of the telephones where were concerned? A. No; it indicated a frame rupture.
14160. Q. What other new matter did that plan show you? A. I think I have referred the principal things.
14161. Q. The two telephone wires? A. And the general position of the tube and coil.
14162. Q. Now, did you not give evidence about those telephone wires at the inquest? Q. Yes, I said that, as I remember rightly, I thought the wire had been disconnected from mine, but that I could not swear to it, or anything to that effect.
14163. Q. And that additional fact here you had, then, about that telephone wire near the inquest? A. Well, the plan has elucidated the manner and made it clear to me that the wire has been detached at the machine end, and that there has been a frame rupture in connection with that wire.
14164. Q. Could not you say that from your own observation in the mine? A. Well, I did not see it. It was to the neighborhood of a bore, which was in a pretty high state at the time, and we did not dwell too long on it, whilst there were many occupied some days in examining the evidence.
14165. Q. Well, in doing anything else besides that? A. Well, those are the principal things.
14166. Q. And that information is supplied to you by someone putting it on a plan? A. Yes.
14167. Q. Did you go to verify it? A. No, I did not.
14168. Q. Do not you see that it would be a very simple matter for a telephone wire to be broken in a right or two different places after the disaster? A. No; I think it is highly improbable. It is very improbable, I think.
14169. Q. Well, perhaps you can tell me this: What was the volume of air passing up the No. 1 main level on the day of the disaster? A. I cannot tell you that.
14170. Q. Have not you seen the record of it? A. I am not aware that the air was taken on the day of the disaster.
14171. Q. Can you give me an estimate of what you would expect would be passing up the No. 1 main level immediately prior to the disaster? A. Well, I do not see how I possibly could give an estimate. I think it is impossible for me to give an estimate.
14172. *Mr. Moore* | What you want to get is the rate of travelling of the air.
14173. *Mr. Egan* | Q. Twenty thousand cubic feet, or whatever it might be per minute, travelling up there—multiply the volume of air that was directed into the No. 1 main (Right) section? A. I cannot remember the constant in all the plans.
14174. *Mr. Egan* | Q. I suppose you had for the ventilation books of the mine, which were put in as exhibits in the inquest, and were ordered by the Commission, which at Williams, to be produced as exhibits before the Commission. There had not yet been produced, but Mr. Egan said he would telegraph for them at once.
14175. *Mr. Moore* | What you really want to understand is the approximate rate of travelling of the air. It does not matter about the number of cubic feet.
14176. *Mr. Egan* | Yes, and about the volume, too, because, if there was a very heavy volume travelling up, there would need to be a large amount of gas coming out of the veins to make it an extractable atmosphere.
14177. *Mr. Moore* | If you give the section of the engine place, and if you then get the rate of travelling of the air, it might give what you want.
14178. *Mr. Egan* | Q. Cannot you give me an estimate? A. I cannot. I would not like to say.
14179. *Mr. Atkinson* | I suppose there were probably 25,000 cubic feet.
14180. *Mr. Egan* | That is what I thought myself.
14181. *Witness* | I could not say. It is probably less than that.
14182. *Mr. Egan* | Q. Now, can you say, as a fair estimate, 25,000 cubic feet per minute? What do not you understand for you to know about how much air was passing up that shaft, do not you regard that as an important matter?
14183. *Mr. Bruce Smith* | Yes, do not let us have it said afterwards that Mr. Atkinson has sworn that there was 25,000 cubic feet of air. My friend is asking Mr. Atkinson to appear in an examination, and we do not want him afterwards to say that Mr. Atkinson absolutely swears it.

14164. [Answer to Mr. Lysight's question:] I know that the quantity of air which was circulating, according to the ventilation book, was in accordance with General Rule 1 more than the maximum quantity was supplied, but I do not remember, for the moment, the quantities which were going in each split.

14165. Q. Do not you remember it is an important matter for you to have known, at least as you could, the amount of air circulating up that No. 1 main level on the day of the disaster? A. I do not see how I could have known it.

14166. Q. Could not you have taken the ventilation book for the previous record, and seen what the split was on that occasion? A. Yes, that is what I would like to do now.

14167. Q. But do not you think it was somewhat unusual to have done it before now? A. No, I do not think that it was.

14168. Q. Now, if we take the assumption that there would be about 20,000 cubic feet of gas—with the number of men working in that district, if one could not very well be less, could there? A. Yes.

14169. Q. Taking the number of men, boys, and horses in that split, what would be the maximum required in so up the No. 1 main level? A. 5,000 or 10,000 cubic feet would supply the quantity required.

14170. Q. That would be the maximum required?

14171. Mr. Bruce Smith: Q. Do you mean for the main conveyed in the mine at that time? A. On that particular split.

14172. Mr. Lysight: Q. And it is a fair assumption that there would be a surplus of, I suppose, 5,000 or 10,000 cubic feet? A. Yes.

14173. Q. So that the volume passing would easily be put at not less than about 15,000 cubic feet per minute? A. I think so.

14174. Q. Now, is it not a fact that a considerable quantity of fire-damp would have to come from the waste to form an explosive atmosphere, when that volume of air was there to sweep it away and dilute it? A. I do not exactly understand your question.

14175. Q. That 15,000 cubic feet passing would dilute a large percentage of fire-damp, would it not? A. Would dilute? Well, I might say that 150 cubic feet of gas would afford sufficient, under certain conditions, with that volume, to make it dangerous, if there were also a flood of dirt, as has been suggested.

14176. Mr. Robertson: Q. But is not there a time-factor as well in the question?

14177. Mr. Lysight: Now, for the present, leave out any consideration of any real dirt, and take it that there were only fire-damp and air, what would be the volume of fire-damp required to be explosive, meeting that air?

14178. Mr. Bruce Smith: Do you mean without coal dust?

14179. Mr. Lysight: Yes, I am leaving out coal dust altogether at present, for a reason you will see.

14180. Mr. Bruce Smith: That is assuming there was no coal dust?

14181. Mr. Lysight: Yes, at 10, well, about 750 cubic feet.

14182. Q. Now, does your theory depend on the gas being brought to an inflammable point by meeting the waste air? A. I think it was associated with coal dust.

14183. Q. If my learned neighbor said that it is altogether for the present,—do you mean that the gas, when brought to its inflammable point, was brought to it by meeting that air? A. I do not see how you could possibly leave out the coal dust.

14184. Mr. Bruce Smith: Now Your Honor sees the difficulty. First of all, Mr. Atkinson was asked to assume a condition of things in which there was no coal dust. Then Mr. Lysight goes on to say "Did it do so without?" He implies by a hypothetical case with a supposed actual case, and it will lead, I am afraid, to a lot of complications.

14185. Mr. Lysight: What I mean is this—up to the time that the gas met the air—

14186. Mr. Bruce Smith: The time that it did meet. You see you are on a hypothetical case that Mr. Atkinson says never took place.

14187. Mr. Howe: What is the question?

14188. Mr. Lysight: At what particular spot does Mr. Atkinson think that the mixture of gas and air became inflammable?

14189. Mr. Howe: I do not see how he can possibly answer that. What Mr. Atkinson suggests is the blowing out of a mixture, which he cannot, by any possibility, define the proportions of—the blowing out with force of a mixture of gas and air in the release of very slowly moving air coming up through the engine house.

14190. Mr. Bruce Smith: But does Your Honor appreciate my objection to the form? Mr. Lysight begins with a hypothesis, but does not continue the hypothesis in each question; he drops the hypothetical form, and speaks in an actual form, and Mr. Atkinson may be answering all through the answers that he is still on the hypothetical form—does not that seem to you?—but he will be answering questions in an actual form that should be put with a hypothetical prefix. My own experience of examining witnesses over twenty years is that, if one begins a series of hypothetical questions, each hypothesis must be put to every question—“if so-and-so would so-and-so,” but “Did so-and-so?”

14191. Mr. Howe: Mr. Lysight, you were, in a certain extent, passing from the hypothetical to the actual. Mr. Atkinson has said all along, “I do assume as a fact that there was coal dust from the first.”

14192. You say “Put the coal dust out of the question,” and “Do not you see what would happen?” You should say, “Do not you see what would happen, then, if so-and-so were so-and-so?” You do not put it in that way, but you ask Mr. Atkinson what probably happened, Mr. Atkinson said believing in the coal dust.

14193. Mr. Lysight: I can put it shortly, Your Honor.

14194. Q. Now, assuming the coal dust as a factor, your theory assumes a cloud of dust being raised in No. 1 main level and traveling east? A. Well, I do not know that I have referred to the traveling east, I used the No. 1 main level.

14195. Q. The theory assumes a cloud of dust raised by the rush of air and fire-damp in No. 1 main level? A. Yes.

14196. Q. Can I take it that it assumes that cloud of dust from the 4th Right up to the 4th Left, all the way? A. Yes, I think so.

14116 Q And that would be a cloud of dust produced either from the roadway or from the engine-end dust passages? A I do not think that the stappings would contribute, because they were blown towards the travelling road.

14117 Q Well, then, it would be a cloud of dust produced from the roadway, and when, and roof of the No. 1 main level? A Yes, I think so.

14118 Q There was a lot of negligence in the management; not in sufficiently water that No. 1 main level?

14119 Mr. Berry: I object to that question. That is a question that this Court will not, I presume, allow Mr. Holmes to determine. That is a question for the Court—an inference to be drawn from the facts that are put before them.

14120 Mr. Jones: Mr. Atkinson has already answered that, practically, several times.

14121 Mr. Berry Said: Yes, Your Honor, but Mr. Atkinson has, very properly, complained to me, although he did not complain to the Court, that he considers the Court here to assist the Commission, as an expert, to find whether or not there was negligence in certain circumstances; and he says that, instead of being treated as an expert assisting the Court, he is really asked to assume the functions of a jury, and to say whether there is negligence or not. How can Mr. Atkinson say whether it was negligence or not? He may not know the meaning or law of negligence. Negligence has forced the subject of special judgments by Courts. Yet Mr. Atkinson is asked to find upon the case when the Commission are going to concern themselves with negligence, when they have heard the whole of the evidence. I can understand Mr. Atkinson being asked what he thinks, and what he saw, and what he believed, but not his being asked to make determinations as to whether he thinks the management was negligent in committing something or doing something. I can quite imagine his being asked whether, if he had been the Manager, he would have thought it a discreet thing to do; I should not object to his being asked that. But he is being asked the legal question, "In your opinion, was there negligence, or gross negligence?" I submit that it has nothing to do with the question without evidence.

14122 Mr. Lysaght: The question was put on the basis of getting an expert opinion upon a condition in the colliery, respecting which I asked him, was it not, first of all, practically a dangerous condition, and, therefore, was it not negligence not to have it removed?

14123 Mr. Jones: You have already given yourself away by the expression you have used, namely, "just now—and, therefore." That is a question which the Court has to decide. It is not for Mr. Atkinson to say whether it is negligence or not; it is for him to say, if you like, when he, as an expert, would feel would be the best plan to adopt under the conditions which existed before the explosion took place, but he, rightly, objects to be asked to draw a conclusion of negligence, which is one of the principal questions for this tribunal to settle. I do not think it is a proper way to put the question; and it would not have been allowed, probably, in any Court trying a matter of this kind, it would not have been permitted to put to an expert the criminal question as to whether something was negligent, or whether it was not. Whether it was good management to water, or not, is another question, and that I suggested to you before, was the proper way to put it.—"Supposing you had been managing the mine, would you, as would you not, under the circumstances which you saw then existing, before the explosion, have watered in certain places?" But all those questions have been put so often that it seems to me that this is a repetition of what has gone before, two sentences ago.

14124 Mr. Lysaght: Q If your theory depends on the coal-dust coming to the 4th level, where you think it met the main level, would you not, if you had been Manager, have watered the No. 1 main level thoroughly watered? A In the light of what has happened I certainly would do even better.

14125 Q Is it possible that, but the No. 1 main level been thoroughly watered, the disaster would never have occurred? A That depends to some extent upon the quantity of gas which has been given off, and which is impossible to determine.

14126 Mr. Jones: It is quite clear that it is impossible, in the nature of things, to answer that question.

14127 Mr. Lysaght: Yes.

14128 Q But, in the absence of the coal dust it would have required a much larger quantity of flame-gas to have been ignited by a naked light.

14129 Q Now, you do know that the danger arising from the quantity of dust that was on the No. 1 main level was well known to all mining people? A Well, I think there is some variety of opinion, even here, as to that.

14130 Q What I do not quite understand, Mr. Atkinson, is your manner that you consider it had management not to water now, but you would not consider it had management not to have watered the main level before the disaster.—Because I put it to you that all the knowledge of the dangers of coal-dust was well-known before the disaster? (Whereof did you mean?)

14131 Q Yes, follow that? You have already said the disaster resulted not from information regarding the danger of coal-dust, and that the English employees had afforded plenty of news. Now, I do not understand why it would be had management not to water now, and yet it would not be had management not to have watered the main level before the disaster.

14132 Mr. Berry Said: I do not think Mr. Atkinson used the words "had management."

14133 Mr. Lysaght: Q I am asking you now? A But I think you suggest that I said it before.

14134 Q I think on Thursday you said that,—but I ask you now, would it not be had management not to water the No. 1 main level?

14135 Mr. Berry Said: I object to that. It is only putting it in another way.

14136 Mr. Lysaght: I am using Mr. Jones's expression.

14137 Mr. Jones: No. I suggested that you should ask how he would have managed himself.

14138 Mr. Lysaght: Well, I will put it that way.

14139 Q Were the disaster, would you, as Manager, water the No. 1 main level? A Yes.

14140 Q Before the disaster, would you, as Manager, have watered the No. 1 main level? A I could not say, really, what I would have done. I do not wish to guess as anything more than my ordinary business being done, therefore, it is impossible for me to say what I would have done under the circumstances.

14141 Q With all your knowledge of the dangers of the coal dust that was there—[interrupted]

14142 Mr. Berry: There is no evidence that coal dust was there.—[interrupted] Answering that coal-dust was there—put in that form I do not object to it.

14443 *Mr. Lyngby* Q Well, assuming that that was the case, and with your knowledge of its danger, do you think it is any thing that you would not have wanted, as Manager? A Well, it would probably have thought it necessary to take particular regard to the actual causes of explosion, and to take precautions to prevent their starting, and that would be, in the case of a small explosion, if there were any and every place, as water does, if I had had a knowledge of the possibility of a small explosion of freewheel starting an explosion, I would have thought it necessary, in good management, to use safety-lamps as a precaution against that contingency.

14444 Q And, if you thought there was a probability of a small freewheel explosion, would not you also have considered it necessary to water the main No. 1 level? A No, I think that was important precaution is to adopt the use of safety lamps, and thereby avoid the possibility of the small gas explosion.

14445 Q Then, may I take it that, with the knowledge of the conditions at Mount Kemble before the disaster, in your opinion, there was no necessity to water the No. 1 main level? A I do not think I dare say so.

14446 Q Well then, I ask you that now,—with your knowledge before the disaster of the conditions of Kemble Mine, in your opinion, was it unnecessary to water the No. 1 main level? A Well, so long as the legal obligations were carried out, and precautions adopted to prevent the possibility of an explosion by that as by devoting, I do not know that I would have watered it. As I have said before, I am not left.

14447 *Mr. Lyngby* Q In the witness's light of your imagination, would you have anticipated an explosion occurring in the way that is suggested to have occurred? A No, I would not, having regard to the large area of place that had been taken out previously.

14448 Q Assuming that the theory is correct, of a falling occurred by a fall down out gas and air from the old Right, which was ignited by a naked light in the main drainage road, is it not absolutely untrue to assume disaster? A I have not been able to get a possible case, certainly.

14449 *Mr. Lyngby* Q But, Mr. Atkinson, the danger of the fact that would not be enough? A Confined in only dangerous under certain specified conditions.

14450 Q I know that? A It is perfectly harmless, except under certain conditions.

14451 Q Now, let us take the legal obligations altogether, because I am speaking to you now as if you had been Manager, do you say, in your opinion, knowing the conditions of Kemble, it was not necessary to water the main level before the disaster?

14452 *Mr. Barry* I object to that question. I assume, for the purpose of this inquiry, that so long as the legal obligations cast upon the Kemble Mine were carried out, they were not broken, except morally, which, I submit, has nothing to do with the Court. He is asked the question—if the legal obligations were carried out, would he not be dependent to meet? Of course if it showed affirm the bona fide point of view, it might be different, but I submit that has nothing to do with this inquiry.

14453 *Mr. Atkinson* Legal obligations are certainly a very strong factor in determining a question of negligence, but they are not absolutely the determining factor, even in civil actions. Perhaps you remember the case of an accident to a train in which that question was considered by the Courts in England, and decided against your contention. That was a case in which it was held that it was quite right for a Jury, on the question of negligence, to consider the fact that the Company had not adopted the communication system, even if through, under the circumstances, the Company was not bound, in law, to adopt the system, and, at the same time, it had been made compulsory, by law, under other conditions of running, to adopt it. What the Court said there was this: "It is known that the telecommunication system is a good system, the Company knew it, the Company might have adopted it, under other circumstances that Company would have been compelled by law to adopt it, but the Company did not choose to adopt it, because it was not compelled by law to adopt it, if it had been adopted, probably the accident would not have happened, I know it for the Jury to say whether, and how far, the non-adoption of the precaution affects their finding in relation to the question of negligence." There is no doubt that that contention is wrong.

14454 *Mr. Atkinson* The same thing has occurred in the case of the omission of sparks from an engine, where there was a statutory requirement as to what should be kept, they used it, and the distinction was between, previously, common-law negligence and statutory negligence.

14455 *Mr. Barry* That is the point I take here.

14456 *Mr. Atkinson* There is no doubt, Mr. Barry, that you are very well entitled that, so long as the management complies with the law, that is a very strong argument in favour of the theory that the management is not guilty of negligence, but still you cannot contend that that position is a conclusive one. It is a strong force, and, as such, it has a great deal of weight, but it is not conclusive, and, therefore, Mr. Lyngby may ask the Commission, both as a matter of law and as a matter of common sense, to consider whether the Company should not have gone beyond its legal obligation in certain respects.

14457 *Mr. Atkinson* I was not joking, Mr. Barry in his objection, because I thought the Commission would want outside statutory liability.

14458 *Mr. Atkinson* Of course it does. It goes to common sense, accidents do not always come up to common sense.

14459 *Mr. Barry* I had in mind that case in England, but that was where a well established practice had not been carried out by the Company, but there is no such question here, for the purpose of watering was in entirely apart from what is imposed upon them by law, either common law or statute law.

14460 *Mr. Atkinson* The only question is whether the Commission ought to attribute the evidence on the ground of that legal compulsion to adopt the plan which Mr. Lyngby suggests, ought to have been adopted, and what I have to hold, as a matter of law, as well as of common sense, is that the Commission must include the evidence on that ground.

14461 *Mr. Atkinson* I think there is a very complete answer to that contention, in this respect, that the Commission is asked, not only to find out where is blame, but to make suggestions for the future management of mines, and, therefore, it goes beyond the branches of existing law, in order to ascertain what further provisions of law are required as future; and, therefore, if this inquiry were to stop at the branches of the present law, it would not reveal what provisions are required for the future.

14462 *Mr. Lyngby* Q Knowing the conditions of the Kemble Mine before the disaster, would you not, as Manager, have watered the No. 1 main level? A I cannot say whether I would or not.

higher than an explosion of gasoline. The pressure of a steam boiler therefore causes the intensely red effects of an explosion. By the aid the depth and intensity of flame is increased. The force of an explosion that abstracts heat is neutralized to a limited extent, by the presence of dust in the atmosphere, so, for example, in gasolene, or mixed in distant buildings, and tends to neutralize of gasolene dust itself. The distance rather provided by coal in a minute state of division (coal) by the action of these exhaust instruments in explosion, and the production of gasolene is neutralized. By distribution, gas itself may be provided which, on the point of the first explosion, can be ignited, and at various the effects accordingly produced. An explosion of gas in a dirty room is generally produced of much more character than an explosion of coal in a room where no dust exists. The kinds effects of steam explosions, where a very small quantity of gas could have existed, is also explained. On one of the engines that the explosion at Wall College is one of the most terrible instances of that in record.

Do you remember reading that passage? A. Yes, I think I have read that.

14595 Q. Do you know that that was published as far back as 1867? A. Yes, I think that is the year. 14596 Q. Now, in view of that information, and the conclusions drawn by a Commission concerning an explosion in the same district, and in the same case, do you say that it was not loudly enough before all mining people before?

14599. Mr. Brown Q. What was loudly before them, the report?

14594. Mr. Lyngby Q. The danger of coal dust.

14592. Mr. Brown Smith Q. Your Honor was then, that, after reading that paragraph, Mr. Lyngby made the witness, "Well you saw my that this question of the danger of coal dust was not loudly enough before all the mining community?" Well, that is for the Commission to say.

14598. Mr. Brown Q. All that Mr. Lyngby saw was of Mr. Robinson in the state of Wisconsin as the subject, and that is hardly a question there is any doubt on.

14594. Mr. Lyngby Q. Now, Your Honor will pardon me, that is a reason that Mr. Robinson gives that he would not water the mines. He says "The effect of the explosion has brought the matter as loudly before everyone in the mining community, and before everyone concerned with mining," and that is in answer to my question—"Why should it be suggestive and to water now, and not suggestive not to water before the disaster?" That is the reason he gives. Then I am showing that it was loudly before the mining public by the report in 1867 of the Bull explosion, and then it was explained, and therefore I am putting it to Mr. Robinson—is not his answer an absolutely correct one?

14595. Mr. Brown Smith Q. Surely that is a matter of common, Your Honor.

14596. Mr. Lyngby Q. Well then, do you want to give any other reason besides what you have given, that the matter was not loudly before mining people, and that the explosion about the case? A. Well, I might say that, if it had been thought of very largely, by the mining community, the Legislature would probably have dealt with it in their 1896 Act in a different way.

14597 Q. Is that the only reason? A. It is the only one that strikes me at the moment.

14598. Mr. Brown Smith Q. You mean the 1896 Act brought no reform as the result of that report?

14599. Mr. Lyngby Q. Indeed.

14599. Mr. Brown Smith Q. But not in the direction that you are suggesting now.

14599. Mr. Lyngby Q. But is more precise.

14598. Mr. Brown Smith Q. Yes, in other directions.

14598. Mr. Lyngby Q. Do you know that the Bull Commission also found—"That the explosion was intensified, and the flame increased, and was confined to distant parts of the district, by the presence in the atmosphere of the mine of dust-dust in a minute state of division?" A. Yes, I have read that passage.

14594 Q. And here you read also that, "In event of gas being present in an mine dust in minute division existed, a very serious explosion might, by this means be the result. Indeed, in some of the most disastrous of recent explosions in Great Britain, it is doubtful whether the most serious agent was not coal dust itself?" A. Yes, I have read that too.

14595. Mr. Brown Smith Q. They are more exact than the Chamberlain Commission.

14595. Mr. Lyngby Q. And do you know that one of the recommendations of the Bull Commission was—"Where dust exists in a mine to such an extent that it is liable to become inflammable, it should be immediately and efficiently damped by water?" A. Yes, I have read that too.

14597 Q. Well now, I want to know, as you know there were no appliances at Kanabla to water the sides or roof as it, why did not you not make some suggestion to read the danger that might be there?

14598. Mr. Brown Smith Q. Do not answer that. Now, Your Honor was the objection to that question. If Mr. Robinson gave an answer to that question, he would appear, from the evidence, to be admitting that he had known all these things, of which my friend says "as you know." I object to it. I do not mind Mr. Lyngby saying "Assuming, you know, then why?" but not "as you know," because the expert answer to that would probably stand, on the evidence as it would be ultimately proved, that he did know it.

14595. Mr. Brown Q. It seems of making suggestion too non-polemical, Mr. Lyngby. I have called your attention to that before.

14599. Mr. Brown Smith Q. I know it is done with the idea of confusion, but my friend puts two, and sometimes three, questions in one.

14597. Mr. Lyngby Q. I will put it in plain.

14597 Q. Did you know there were no appliances at Kanabla to water the sides or roof? A. Yes.

14594 Q. Did you know that the only watering that was done there was with a tub with one hole in the bottom of it? A. Well, I know that the only watering that was done was on the floor. I do not know whether there was one hole or more.

14595 Q. And did not you also know that the appliances for watering the floor was inadequate? A. Well I cannot tell whether I know that or not.

14594 Q. But you have told us more, you know, that it was inadequate? A. Yes.

14598 Q. Now, would you whether you do know it was inadequate?

14597. Mr. Brown Smith Q. That was only suggested by the expert.

14594. Mr. Lyngby Q. I have asked my own chamber you know it was inadequate?

14593. Mr. Brown Smith Q. For the purpose.

14593. Mr. Lyngby Q. You cannot say now whether you know at that time that it was inadequate to water the floor? A. I could not say whether I knew it or not.

14594 Q. Did you ever suggest? A. I do not remember about that. I know that there were some water tubs in the pit, which let the water out at the bottom, but I am not sure that I saw them at work, and therefore I could not judge as to whether the water was adequately spread over the floor.

Witness—A. A. Atkinson, 21 February, 1908

14592 Q Now, with the exception of your letter to the Manager, dated a few months before the disaster, what did you ever do to see that the dangers from coal-dust were abated in Kimbela? A I am not aware that I did anything.

14593 Q Did you send anyone? A I did not send anyone to Kimbela, but I went there to several occasions, and asked them to do them.

14594 Q Now, although you had this report of the explosion at Bulhi, namely, it is a great misfortune, by dust, and although the dangers were pointed out there, you admit you did nothing for fourteen years to abate the dangers of dust at Kimbela? A No, I do not admit anything of the sort.

14595 Q Now, although you had this report of the explosion at Bulhi, namely, it is a great misfortune, by dust, and although the dangers were pointed out there, you admit you did nothing for fourteen years to abate the dangers of dust at Kimbela?

14596 Q Then you did nothing for six years? A I was not here then six years.

14597 Q How long were you here, before you went then later, three months before the disaster, how long have you been Chief Inspector? A Five years last September.

14598 [In compliance with a request by Mr. Bruce Smith, Mr. Lighthill read Mr. Lighthill's question, as under]—"Then, although you had this report of the explosion at Bulhi, namely, it is a great misfortune, by dust, and although the dangers were pointed out there, you admit you did nothing for fourteen years to abate the dangers of dust at Kimbela?"

14599 Q Now, Lighthill? Make it five years.

14600 Q I object to that question—the dangers of dust. We do not admit just there were any dangers of dust there. "If there were any dangers there, did you do anything to abate the dangers of dust?"—that is the way it should be put.

14601 Q Now, Bruce Smith? I object to it in another way. There is an assumption here that Mr. Atkinson, who has got the general supervision of about 100 coal mines— [interrupted]

14602 Witness? About 100.

14603 Q Now, Bruce Smith? There is an assumption here that he was to do something. I think there was an assumption that it is a part of the duty, not merely of the Inspector, but of the Chief Inspector in New South Wales, to practically manage these mines. He cannot do that. Your Honor sees the force of that question. If that were his job, it would save him an address by Mr. Atkinson that it was his duty to do something in a particular mine to abate a possible explosion. It is not his duty to do anything. It is merely his duty to see that the Manager does what the law imposes upon him, and Mr. Atkinson has already said that he cannot say there was any breach of the mining law, and he has already pointed out, as the previous part of his evidence, that some of the things Mr. Lighthill has suggested were outside his power to compel the management to do, and I do submit that a high official like Mr. Atkinson should not have put to him a question which, whatever answer he gave, would make it appear that he also is that it was his duty to do something. It is not his duty to do it at all.

14604 Q Now, Bruce Smith? It is quite open to Mr. Atkinson to repudiate that duty. It is quite open to him to explain away his presumed or suggested duty, but, at the same time, there is nothing to prevent the question being put in that form, either right or might be suggested that too much is being suggested as inconsistent with Mr. Atkinson. At the same time it is clearly inconsistent upon him, if he does know that something is going wrong in a mine, whether it is a matter which he has power to set right or not, to try his best to stop it. Something very obviously dangerous was being done, for instance, if a mine were being lit by candles, which was handled about by all the miners, or a general, poisonous, noxious, Mr. Atkinson would certainly consider himself bound to say something, I presume.

14605 Q Now, Bruce Smith? Your Honor will understand that I am not at all attempting to recriminate the responsibility of the Chief Inspector. All I say is that a question is being put to him so much so much a form that, whatever way he answers it, he will come to admit that there was a duty upon him to do something, as the suggested does among other people did it. Mr. Atkinson is here as a witness, in order to answer his opinion on various questions. I think if Mr. Atkinson knows just, from Your Honor, that he is at liberty, himself, to take exception to the form of the question, he is quite entitled.

14606 Q Now, Bruce Smith? How is the Court to assume that Mr. Lighthill is not, in an intention to suggest that one of the witnesses to whom might be the Department of Mines? Mr. Lighthill has a perfect right to make that question on the ground he might as well go so far as to say "I have no fault to find with the management, but I have fault to find with the Department." If he suggests that to the Commission, they cannot stop the suggestion.

14607 Q Now, Bruce Smith? No, but Mr. Lighthill suggests to Mr. Atkinson "You did nothing," not "You did nothing that you had power to do." I could not word that at all, because Mr. Atkinson has a very easy answer. Mr. Atkinson explained there are four days ago that he had the right to require the management to water dry and dusty places before they get into the state, "but," he said, "there are no power asked." But, if Mr. Lighthill has permission to put this question, he should be expected to put it in this way—"But you did nothing that you had power to do?" or "You suggested nothing that you had power to suggest, for preventing it?"

14608 Q Now, Bruce Smith? That is not the same principle that I alluded to before. I do not think that the Court is limited in the question whether Mr. Atkinson was acting strictly within his legal powers or not; and I do not think the Department could justify its action by saying that it complied entirely with the law if, say, for the sake of argument, the Department had merely prevented some, not illegal, but obviously dangerous, practice. It could not shelter itself then, any more than the management could—nobody could shelter himself—nobody that suggestion. The management could not and the Department could not. If some new practice were adopted—I have suggested, for instance, the use of gas-lights in a high-road or boggy go-lucky way—oh, well, of course, the Department would try to put its foot down on that, and stop it, and would be bound to do so.

14609 Q Now, Bruce Smith? My attempt for suggesting to me that was to protect the interests of the Kimbela Colliery. I object to this question put by Mr. Lighthill. To abate the dangers of coal-dust at Mount Kimbela Colliery, "A" submit that it is not a fair way to put the question, or to have it on the Depositions. I do not wish to elaborate or cut down the responsibilities of the management, it is assuming that there were dangers in that colliery. As far as Mr. Atkinson's duties are concerned, it is assuming that there was a matter that Mr. Bruce Smith may take up, but I submit that, before the Chief Inspector can be asked whether he took steps to prevent the dangers, we have the right to ask, and the Court has a right to have, some evidence that the dangers were there.

14610 Q Now, Bruce Smith? As far as that is concerned, Mr. Atkinson's own evidence assumes that coal dust was a factor in producing the very explosion, rightly or wrongly; and, rightly or wrongly, it is assumed that

that that factor might have been contemplated beforehand. Now, Mr. Lyngst, says that it is the very least that is a surprise. The suggestion is that it ought to have been contemplated before. It is a question for the Commission whether it ought to have, or might not so have, been contemplated before, and provided against. The Commission cannot shut out evidence that that is so.

14504. Mr. Berry: I do not desire to shut it out, if it is put in a different way.

14505. Mr. Bruce Smith: The Commission will not look to the Chief Inspector to interfere with the management of an industry beyond the point at which the Legislature has said that it is his duty to do so, and beyond the point at which he has sworn to do so, because, if Mr. Hoffman were to take up a sort of general position with regard to all these matters, and to say, "I have only the power to do so much as I require you to do so much as to add to the addition to that which is required by the Act and Regulations," and to interfere in many other ways beyond the limits which have been laid down by the Legislature, the very last people to whom counsel would be the Mine Managers, and they would say, "Are you going to manage the mine, or are you going to manage them?" You are there with rather very limited powers.

14506. Mr. Bruce: I think the Commission have already decided that point. It is a very strong argument in favor of the theory that the Department has done its duty, that the Department has inquired everything which the law enables it to enforce, but that does not necessarily include the whole duty of the Department to the community, and if (perhaps, for instance, you suddenly have a large mine about as largeable, there is clearly a duty imposed on the Department, looking to the position which it does of recommending the proper management of mines, to guard against the dangerous application of new inventions which have not yet been tried with by any legislation. There are many instances of that.

14507. Mr. Bruce Smith: I quite admit it, but your Honor must not lose sight of this fact, that this report is fourteen years ago, that the Legislature has dealt with the whole of the mine management only on two occasions, and that the evidence — [interrupted].

14508. Mr. Bruce: After all—I do not wish to interrupt you—but all these are questions of degree. They are not questions of principle. On principle we should stop Mr. Lyngst. Even if we did disagree with him—I will not say that we do—we could not stop him, if he makes suggestions, even though his suggestions may be apparently unfounded.

14509. Mr. Bruce Smith's request, Mr. Justice again read the question, as follows:—Then, although you had this report of the explosion at Bala, caused, in a great measure, by dust, and although the charges were pointed out there, you stated you did nothing for two years to abate the danger of dust at Bala?—

14510. A. Well, I called the attention of the Manager to observe General Rule 8, in regard to the use of safety lamps, and also General Rule 11, in regard to the blasting. I was not aware myself of any report of an explosion having been made in the mine since my arrival, and I think that the evidence which I have referred to in the verbatim, could not reasonably have been anticipated.

14511. Mr. Lyngst: Q Do you remember stating at the outset, p. 10, "the proof of the explosion is the best evidence as to whether such conditions were dangerous, was an explosion was started?"

A Yes.

14512. Q And the "such conditions" referred to were that there was a sufficient quantity of coal dust in the 4th Right to have carried it some considerable distance?

14513. Mr. Bruce Smith: Do not answer that for a moment till I see whether the two charges are introduced.

14514. Mr. Lyngst: It goes on this way:—I think that the 4th Left rope road was about as dusty a place of road as I saw, and, once the explosion was initiated, there was, I think, sufficient dust to carry the explosion along for a considerable distance. I think that the proof of the explosion is the best evidence as to whether such conditions were dangerous, was an explosion was started. I think that the explosion has been carried on by coal dust after it was started.

14515. Mr. Bruce Smith: "Once an explosion was started?"

14516. Mr. Lyngst: Yes, of course.

14517. Q Now, then, it being clear that the dangerous conditions were there, I ask again, with the exception of your two letters to the Manager, did you do anything to abate the dangerous condition?

A I did nothing beyond that and calling his attention to the danger of the dust.

14518. Q That is in the letter? A Yes.

14519. Q Now, I am going to ask you in these two letters, to show what you really did do. In your letter of the 17th of May, 1903, you say—

Referring to my visit to the Mount Nevada Colliery on the 12th instant, and our conversation in regard to it, and then, excepting what were—

C. Old Harry lamps were used by daylight, being considered to risk of did not depend on the General Rule 8, should be replaced by another type of safety lamp.

Do you know whether those old Harry lamps were replaced? A Well, I know that I wrote to the Inspector, asking his attention to it, and asking him to let me know if it was not done, and, giving me away in the illustration, I presumed that the matter had been attended to.

14520. Q Do not you know that Mr. Rogers admitted that certain lamps were not done by Dr. Robertson, and had never been used? A I think I heard that.

14521. Q Were not those the lamps sent down to replace the old Harry? A I do not know that.

14522. Mr. Bruce Smith: Now, your Honor was how my friend goes from what I ask you at the request, or, rather, from what Mr. Hoffman had done prior to the explosion, in what Mr. Rogers, the Manager, admitted at the outset. What consequences then?

14523. Mr. Lyngst: One moment.

14524. Q Did you ascertain whether the old Harry lamps, which you said were illegal, had been replaced—yes or no? A I cannot answer it "yes" or "no." I wrote to the Deputy Inspector after the mine, pointing out to him what I had suggested, and asking him if he would let me know, and, therefore, I presumed that it had been attended to.

14525. Q And you never bothered to make any further inquiry from him? A No, I do not think I did.

14526. Mr. Bruce Smith: Now, your Honor—do you never bothered?—do not know that.

14527. Mr. Justice: Q Who was the Inspector then? A Mr. Rogers.

14528. Mr. Bruce Smith: Do not tell me how much it is—"you never bothered?" and then the witness goes on to say, and it looks as if it were too much trouble.

Witness—A. A. Atkinson, 20 February, 1895.

141215. *Mr. Atkinson* [The question and answers go down separately, Mr. Bruce Smith.
 141216. *Mr. Bruce Smith* [They do here, but not in the Press.
 141217. *Mr. Atkinson* [It is impossible for my what will go into the Press.
 141218. *Mr. Atkinson* [I do not see that it helps the matter to put the question differently.
 141219. *Mr. Atkinson* [It was not my intention to put the question differently.
 141220. *Mr. Atkinson* [Mr. Lyngby, we must try, on this inquiry at any rate, to eliminate all police court
 matters.
 141221. *Mr. Bruce Smith* [It is a scientific inquiry, and it should be a scientific atmosphere; and it will
 go on my and your mind when I hear questions like this.
 141222. *Mr. Atkinson* [I have read this. Mr. Lyngby has not put the whole of the evidence or answer to
 the Council's question as to those safety-lamps by Mr. Rogers.
 141223. *Mr. Lyngby* [What page is this?
 141224. *Mr. Atkinson* [Page 41 (*Report*) yesterday. "I suppose, if safety-lamps were used, the expense would
 be to the Company. The Company supplied the lamps and lighted safety-lamps which we had before
 the disaster, they had not been used, they were sent up by the witnesses, and I was supposed to see
 them, because we did not receive them." He asks Mr. Atkinson, "Did you not hear Mr. Rogers say
 that the lamps were sent down, but were never used?"
 141225. *Mr. Atkinson* [The question is, were they supposed to be identical with the lamps to replace the
 Derry lamps. I think as far as I can see, these were lamps sent up for another purpose altogether.
 141226. *Mr. Atkinson* [That was
 141227. *Mr. Bruce Smith* [And it must not be forgotten that Mr. Atkinson had no power to order them
 to use a safety lamp at all.
 141228. *Mr. Lyngby* [Received a proper safety lamp for examining for gas.
 141229. *Mr. Bruce Smith* [They then, if you had been found within twelve months before,
 141230. *Mr. Atkinson* [He has no power to order safety lamps.
 141231. *Mr. Lyngby* [If you had no power to order safety-lamps, what did you mean by saying that
 the old Derry lamps were out of date and obsolete, in which respect were they illegal? A. Well, I might
 say that the Royal Commission on Accidents in Mines, which published its final report in 1890, spoke
 with reference to the old Derry, Cluney, and Sturgeson, lamps, and recommended that they should not be
 used in regions of high velocity and inflammable, unless protected by a shield.
 141232. *Mr. Atkinson* [Q. Is it not provided for by General Rule 9? A. Yes.
 141233. *Q.* "They shall be so constructed that they may be safely carried against the air current without
 proving in that part of the mine?" A. Yes, that is the rule which refers to this.
 141234. *Q.* And those safety-lamps, I take it, did not comply with this provision? A. I think that was
 understood.
 141235. *Mr. Bruce Smith* [Q. That is, supposing that they are under an obligation to use a safety lamp
 at all. But they were not in this mine, because gas had not been found for twelve months before.
 141236. *Mr. Atkinson* [But, if they use safety-lamps at all—
 141237. *Mr. Bruce Smith* [They were not required to use them by law.
 141238. *Mr. Atkinson* [The law says, "Wherever safety-lamps are used," so evidently the lamps used
 were safety lamps which were not in accordance with Rule 9.
 141239. *Mr. Bruce Smith* [Then I quite see why he said "illegal."
 141240. *Mr. Atkinson* [Q. If a mine is using safety-lamps, is it not clear that they have got to use approved
 safety-lamps? A. Yes.
 141241. *Q.* And, that being so, I want to know whether you entertained whether they were using legal
 safety-lamps? A. Well, I cannot add anything to what I have already said in regard to that.
 141242. *Q.* Now, General Rule 4 is so to regulate being made at the surface, and before each shaft, sometimes,
 whether day or night,—do you know whether that rule was carried out? A. Yes, the reports were
 made, and, so far as I was able to ascertain, were made in accordance with the law.
 141243. *Q.* When you put it in the bottom of your letter, "I shall be obliged to hear from you on these
 matters." Did you hear from the management on these matters? A. Only indirectly.
 141244. *Q.* You did not get any letter? A. No.
 141245. *Q.* And I do not think you got any answer from Mr. Rogers to that letter of the 30th April, 1892?
 A. No, I do not think there was.
 141246. *Q.* You did not ask for any reply? A. No, I did not ask for any reply.
 141247. *Q.* Now, you heard Mr. Rogers say, and the official report, that the examination of the works had
 only been made once a month for some years.
 141248. *Mr. Bruce Smith* [Did they say so?
 141249. *Mr. Atkinson* [No, they did not say that.
 141250. *Mr. Lyngby* [Q. Do you remember how long the examination of the works—for what period of
 time the examination of the works—had only been made every month? A. I do not remember what the
 evidence said.
 141251. *Mr. Atkinson* [Q. Can you say how long the special rules were in force regarding that to be done?
 A. Since about the beginning of 1892, I should think.
 141252. *Q.* Was the same rule in force at other collieries? A. At at other collieries, yes.
 141253. *Q.* I take it that the examination of a mine weekly or monthly would date from the special rule
 being enforced? A. Yes, I take it so.
 141254. *Mr. Lyngby* [Q. But, you do know that, that Mr. Rogers stated, "If I had thought there was
 any reason for it, it would have been practicable to have the works workings inspected once a week, and
 I was aware of Rule 16 in the Special Rules."
 141255. *Mr. Bruce Smith* [Is the rule, then, and "practicable" means as to the examination, not as to
 the frequency.
 141256. *Mr. Lyngby* [I know that.
 141257. *Q.* And that he says that it was only made once a month, and that it had been going on for some
 time. Now, I want to know, inasmuch as there was these several breaches of rules, how is it that you, or
 your Inspector, did not discover this?
 141258. *Mr. Bruce Smith* [He will answer for himself, but not for his Inspector.

14603. Mr. Lyngstøl] Q Perhaps you will excuse me yourself first? A Well, the Inspector's report, from four to five, pointed out that the Act was being complied with, and I was, therefore, unable, from that, to assume that the waste workings were not being inspected as required by the rule.

14604. Q About how often did you, yourself, go to Kinnik's Colliery? A I think I was there once in each year before the accident.

14605. Q Did you, on any of those occasions, look at the report book to see when these things were being examined? A Well, I generally looked at the report book under General Rule 4, but I may have omitted to look at the waste workings report book.

14606. Q Was it not equally important to look at the waste workings report book as at the other report books? A No, I do not think so; but I was assured that the reports were kept in accordance with the rule.

14607. Q You know now that the examination was altogether wrong, do you not? A Yes, I do.

14608. Q And do I understand that you never looked at the waste report book? A I do not remember having done so.

14609. Q Now, had you looked at the waste report book, it would have shown, on the face of it, that the examination was only being made once a month, would it not?

14610. Mr. Bruce Smith] How does he know that?

14611. Mr. Lyngstøl] He saw it in Court here.

14612. Q I suppose it would.

14613. Q Then is it not clear that if your sub-Inspector had looked at the waste report book any time he would have seen that it was only being made once a month? A Yes.

14614. Q In your opinion, was not your Inspector to blame for not looking at that waste report book? Q Yes, I think he was.

14615. Mr. Robertson] Q He might have looked at it or you might have looked at it, and not have noticed that the examination was made monthly, instead of weekly? A I might have done so.

14616. Mr. Lyngstøl] I think, Mr. Robertson, that the face of the report was "The monthly examination."

14617. Mr. Robertson] Quite so, but I say he may have looked at it, but not have observed that the examination was being made weekly.

14618. Mr. Lyngstøl] I think the book itself said, "The monthly examination was this day made."

14619. Mr. Robertson] But are you quite sure? That would be rather an unusual way to put it.

14620. Mr. Lyngstøl] Q Now I like it that that is clear, then for part of the time Mr. Brown was Inspector, and part of the time Mr. Bates was Inspector when the examination of the waste was made only weekly? A Yes.

14621. Q But both of those Inspectors failed to report what was a violation of the rule? A Yes.

14622. Q Do you then say that both those Inspectors, in your opinion, were to blame for not discovering and reporting that violation? A Yes.

14623. Q But you consider that you were not to blame because you had their general assurance that the rules were being carried out? A That is so.

14624. Q And you did not verify that assurance yourself, so far as the waste report was concerned? A I did not.

14625. Mr. Bruce Smith] He did not verify the Inspector's report of his failure by doing the Inspector's work himself?

14626. Mr. Lyngstøl] That is a question to be considered, I suppose, as to whether it was not part of his duties to inspect the books when he went to the Colliery.

14627. Q You might tell me, Mr. Allhouse, throughout the conduct of your office, how you examined yourself absolutely bound not to make suggestions beyond what the law requires you to enforce?

A Well, it is a question covering such a very wide range that it is impossible to answer it "yes" or "no." If Mr. Lyngstøl could bring it within narrow bounds, and specify any particular thing, perhaps I should be better able to answer it.

14628. Q At the moment, do you consider yourself bound not to make suggestions when you are enforcing those suggestions by law? A Suggestions are regarded as advice.

14629. Q Suggestions are regarded as anything?

14630. Mr. Bruce Smith] Is the suggestion of advice, you mean.

14631. Mr. Lyngstøl] Q Anything. Is regard to the duties of your office and the scope of your duties?

A I think I might make suggestions, so long as they are within reasonable limits.

14632. Q Whether there was a power, in you, to enforce them by law, or not? A Yes.

14633. Q And, as a matter of fact, you have frequently made such suggestions, although you could not enforce them by law? A Yes.

14634. Q So that there is nothing in the suggestion of Mr. Bruce Smith's that you could not make suggestions, or would not make suggestions, because you could not enforce them by law?

14635. Mr. Bruce Smith] I never made any such suggestion. I said that if he were constructively interfering with the management of the mine, beyond the point to which he is empowered by law, the management of the mine would be the first to turn round, and refuse to permit such interference.

14636. Mr. Lyngstøl] But should that influence him?

14637. Mr. Bruce Smith] No, and it has not, within reasonable limits.

14638. Mr. Lyngstøl] Q Was it not reasonable for you to suggest something in regard to watering? A I did suggest something in regard to watering in Kinnik's.

14639. Q But, beyond what you did suggest, only in 1895, was it not reasonable for you to suggest something else in regard to watering in Kinnik's? A Well, if I had anticipated any serious accident, I think, generally, it was.

14640. Q But, without an warning any serious accident? A Well, that notice of accident is specially dealt with in the General Rules, and I do not see that it was my duty to go beyond the—

[Interposed]

14641. Q I do not say that. But you have just told me yourself that you did not feel yourself confined within those duties, and you would make suggestions outside them, and I ask you, or that, why you did not make more suggestions regarding the watering of Kinnik's Mine? A Well, I felt that I had done all that it was my duty to do in the matter.

14642. Q But, now, is it not a fact that you did think it was your duty to send sprays to some extent?

A Well, I do not know that it was my duty, but I did it.

12121 *Mr. Bruce Smith* Is it not his duty to spend State money to send down machinery
12122 *Mr. Joseph* I Q Did you send any? A I sent coffee, yes
12123 Q Spruce purchased by the State? A Yes
12124 Q Did you send any to the South Coast district? A Yes
12125 Q To all the colonies? A To the Metropolitan and Ball's, I think. We have at the present
12126 Q Only those two? A I am not very sure. We could ascertain from the papers
12127 Q Did you send some to Mount Pleasant? A I do not remember
12128 *Mr. Johnson* Q May I ask whether the object of sending those spruce was to test their
12129 *Mr. Joseph* A Yes, that was one of the objects, certainly
12130 *Mr. Joseph* Q But what was the main object: was it not to have the place watered? A To
12131 have the water before the Colony Manager's attention, in bringing these spruce before the notice of the
12132 Colony Manager
12133 Q I understood the spruce was sent down for the watering of the mine? A
12134 *Mr. Bruce Smith* Q How ridiculous—one spruce to water 23 miles
12135 *Mr. Joseph* Q To indicate how a mine could be watered with spruce—is not that why it was
12136 sent down? A It was sent in order that they might be tested, and in order that they might be brought
12137 before the attention of the Manager
12138 Q Now, when was that? A Two or three years ago, I think
12139 Q By the fact that, last time, you suggested the necessity of the use of spruce in the South Coast
12140 district? A I do not say that follows from the fact that I sent the spruce for them to test
12141 Q Do you recognize that it would be an advisable proposition to take? A Yes
12142 Q And, although you recognized that from two to three years ago, you never bothered to suggest
12143 it? I beg pardon: you never did suggest—did the Kambla management find any part of their mine wanted
12144 spraying? A I do not remember having done so
12145 *Mr. Bruce Smith* Q Did not you send one to Mr Rogers? A No, I do not think so
12146 *Mr. Bruce Smith* I thought Mr Rogers admitted that he had had one
12147 *Mr. Joseph* I never saw it
12148 *Mr. Joseph* Q Now, in your letter to Mr. Rogers of the 30th April, you say this: "Having
12149 regard, therefore, to the fact that large colony explosions are constantly produced by blasting, and
12150 in consequence of the necessity of coal-dust being in a quantity, or the great of blasting taking place in your
12151 district in dry and dusty places, that the responsibility of General Rule 12, section 4, Col. Mines
12152 Regulations Act, should be strictly observed, and the vicinity of the shaft thoroughly watered, as
12153 required by that Rule." You use those words "preoccupied by means of coal-dust alone"? A Yes
12154 Q That was a notice to the Manager at Kambla of the danger of coal dust explosions, three
12155 months before the disaster, "preoccupied by coal dust alone"—you see that, do you not? A Yes
12156 Q There was a direct notice from you to the Manager at Kambla of the danger of an explosion
12157 being preoccupied through coal dust alone?
12158 *Mr. Bruce Smith* Q That was a notice that went to all the colonies? A Yes
12159 *Mr. Joseph* Q I think it goes to Kambla, by you sending it down to Kambla at present, is that
12160 the meaning that the disaster should be prevented, and that it was not lately before the public before the
12161 disaster does not apply to the Manager of Kambla?
12162 *Mr. Bruce Smith* I object to that. That goes to Birmingham No 28, which the Commission
12163 have not
12164 *Mr. Joseph* Q Coming to these inspections being confined to places that were working—
12165 Managers' attention: that places not being worked were not inspected by him—would an inspection of
12166 the report book by the Inspector have discovered that those places were not being worked?
12167 *Mr. Bruce Smith* I object to the form of that question. Ask whether the book would have
12168 been
12169 *Mr. Joseph* I Would an inspection of the book by the Inspector have revealed— (interrupted)
12170 *Mr. Bruce Smith* That depends on the Inspector. He may be blind. Ask whether the book
12171 would reveal it
12172 *Mr. Joseph* Q Would the book reveal it? A No
12173 *Mr. Joseph* Q The book, on the face of it, I think, would never show that every face was being inspected?
12174 A Let me understand a book book you refer to
12175 Q The Daily Report Book, by the Deputy? A That is, the inspection before commencing work.
12176 Q The inspection before commencing work. I think that shows "We examined the working
12177 12178 12179 12180 12181 12182 12183 12184 12185 12186 12187 12188 12189 12190 12191 12192 12193 12194 12195 12196 12197 12198 12199 12200 12201 12202 12203 12204 12205 12206 12207 12208 12209 12210 12211 12212 12213 12214 12215 12216 12217 12218 12219 12220 12221 12222 12223 12224 12225 12226 12227 12228 12229 12230 12231 12232 12233 12234 12235 12236 12237 12238 12239 12240 12241 12242 12243 12244 12245 12246 12247 12248 12249 12250 12251 12252 12253 12254 12255 12256 12257 12258 12259 12260 12261 12262 12263 12264 12265 12266 12267 12268 12269 12270 12271 12272 12273 12274 12275 12276 12277 12278 12279 12280 12281 12282 12283 12284 12285 12286 12287 12288 12289 12290 12291 12292 12293 12294 12295 12296 12297 12298 12299 12300 12301 12302 12303 12304 12305 12306 12307 12308 12309 12310 12311 12312 12313 12314 12315 12316 12317 12318 12319 12320 12321 12322 12323 12324 12325 12326 12327 12328 12329 12330 12331 12332 12333 12334 12335 12336 12337 12338 12339 12340 12341 12342 12343 12344 12345 12346 12347 12348 12349 12350 12351 12352 12353 12354 12355 12356 12357 12358 12359 12360 12361 12362 12363 12364 12365 12366 12367 12368 12369 12370 12371 12372 12373 12374 12375 12376 12377 12378 12379 12380 12381 12382 12383 12384 12385 12386 12387 12388 12389 12390 12391 12392 12393 12394 12395 12396 12397 12398 12399 12400 12401 12402 12403 12404 12405 12406 12407 12408 12409 12410 12411 12412 12413 12414 12415 12416 12417 12418 12419 12420 12421 12422 12423 12424 12425 12426 12427 12428 12429 12430 12431 12432 12433 12434 12435 12436 12437 12438 12439 12440 12441 12442 12443 12444 12445 12446 12447 12448 12449 12450 12451 12452 12453 12454 12455 12456 12457 12458 12459 12460 12461 12462 12463 12464 12465 12466 12467 12468 12469 12470 12471 12472 12473 12474 12475 12476 12477 12478 12479 12480 12481 12482 12483 12484 12485 12486 12487 12488 12489 12490 12491 12492 12493 12494 12495 12496 12497 12498 12499 12500 12501 12502 12503 12504 12505 12506 12507 12508 12509 12510 12511 12512 12513 12514 12515 12516 12517 12518 12519 12520 12521 12522 12523 12524 12525 12526 12527 12528 12529 12530 12531 12532 12533 12534 12535 12536 12537 12538 12539 12540 12541 12542 12543 12544 12545 12546 12547 12548 12549 12550 12551 12552 12553 12554 12555 12556 12557 12558 12559 12560 12561 12562 12563 12564 12565 12566 12567 12568 12569 12570 12571 12572 12573 12574 12575 12576 12577 12578 12579 12580 12581 12582 12583 12584 12585 12586 12587 12588 12589 12590 12591 12592 12593 12594 12595 12596 12597 12598 12599 12600 12601 12602 12603 12604 12605 12606 12607 12608 12609 12610 12611 12612 12613 12614 12615 126

[14700. Mr. Lysaght.] Yes. I am assuming that he would have said, "We do not examine places that we are being searched."

[14701. Q. However, as far as you know, no such inquiry was ever made? A. As far as I know.

[14702. Q. You described one of the doors in the 5th flight as being "a funny canvas door" yesterday—do you remember that?

[14703. Mr. Brown-Smith.] Would you mind leaving that?

[14704. Mr. Lysaght.] Q. When Mr. Robinson was asking you some questions, you remember stating that it was a funny canvas door? A. Yes.

[14705. Q. That was a door over the No. 1 travelling road, is that? A. Yes.

[14706. Q. Now, the other canvas doors, throughout the mine, were of similar material? A. I think so.

[14707. Q. Would you describe the other canvas doors as "funny canvas doors"? A. Well, I might explain that the term "funny" was only intended to convey to the Commission that with a door did not require very much time to remove it.

[14708. Mr. Brown-Smith.] By explanation?

[14709. Mr. Lysaght.] I did not desire to show that canvas doors were of no value.

[14710. Mr. Lysaght.] Q. What would apply to an explosion would apply to anything else. The canvas doors were, in fact, rightly described as "funny"? A. They were made of the ordinary canvas which was in use at all of the mines.

[14711. Mr. Brown-Smith.] Q. They were no more funny than those in any other mine? A. No more funny than those in other mines.

[14712. Mr. Lysaght.] Q. Now, I want to know when it was that double doors were insisted on? A. Some time since the Kambla explosion.

[14713. Q. Was it in consequence of the Kambla explosion? A. Well, after the Kambla explosion I suggested that we should make a special rule to that effect.

[14714. Q. And has that special rule been inserted in all collieries? A. All the collieries on the South Coast?

[14715. Q. Yes. A. With slight modifications. They are not altogether the same.

[14716. Q. But the use of double doors is being insisted on, is that? A. Yes.

[14717. Q. How can power under the law to insist upon double doors? A. Well, I had the power to suggest a special rule to that effect.

[14718. Q. And would not that be as good as any other power, if you suggested the special rule, and the special rule was approved, would not that be the effect of the Act? A. Yes, provided it was not objected to by the colliery people.

[14719. Mr. Brown-Smith.] They could go to arbitration.

[14720. Mr. Lysaght.] Q. They did not go to arbitration, did they, as far as you know, no objection was made by the colliery people to do that? A. There were some slight objections, but it has not been necessary to go to arbitration.

[14721. Q. Now, will you tell me what it was, resulting from the Kambla disaster, that made you insist on these double doors? A. Well, I cannot say that it was resulting from the Kambla disaster.

[14722. Q. But the idea of ordering double doors came to you before the Kambla disaster? A. Well, the matter had never come before my notice to make suggestions as to that effect in regard to the southern collieries before.

[14723. Q. Well, I ask you did the idea occur to you in regard to the southern collieries to order double doors, before the disaster? A. No.

[14724. Mr. Robinson.] Q. Double doors were in use in some southern collieries before? A. Yes.

[14725. Mr. Lysaght.] Q. Double doors were not in use in Kambla, were they? A. In some cases.

[14726. Q. And, in a number of other cases, they were not? A. No.

[14727. Q. Now, it was the Kambla disaster that caused you to go in for the special rule regarding double doors? A. I cannot say that altogether.

[14728. Q. Well, perhaps, you will tell me what else did it? A. Well, I cannot call to mind what else there was, but I know that I suggested it after the Kambla disaster.

[14729. Q. Well, it is not more than about eight months since the disaster, and it is not more than about four months, or thereabouts, since the rule was got through—and you cannot tell me anything else but the Kambla disaster that suggested this to your mind? A. I do not remember just at the moment.

[14730. Q. Then, may I not take it, that it was the Kambla disaster? A. No, I do not think you may. I do not think that is altogether a fair inference.

[14731. Q. Although you would tell me something else? A. I cannot remember just at the moment.

[14732. Q. Now, tell me what it was, if anything, in the single doors that you saw objectionable? A. Well, the doors on the headings road—[Interpreted].

[14733. Q. Which one, the No. 1 heading road? A. Whenever there are single doors on the headings road, I think they are better to be avoided in more places than in given all.

[14734. Q. And was that the condition at Kambla,—were those single doors on headings road? A. There were at one or two places.

[14735. Q. Is the No. 1 given here? A. In the No. 1 main level, as before—[Interpreted].

[14736. Mr. Robinson.] Q. Approving the No. 1 main level? A. Approving the No. 1 main level.

[14737. Mr. Lysaght.] Q. Could you indicate them, just indicating where the single doors were? A. The 5th Right-side road is one place.

[14738. Q. Where else? A. I think that is the only place on the headings road where there was a single door.

[14739. Q. Before you leave that, you might tell me is that a canvas door or a wooden door? A. A wooden door.

[14740. Q. Now, where else is there a single door in the No. 1 Right, not in a headings road? A. Opposite to the 5th Left-handing road, between the No. 1 main level and the No. 2 travelling road.

[14741. Q. What was that, canvas? A. A wooden door.

[14742. Q. Anywhere else?

[14743. Mr. Robinson.] Q. Mr. Robinson, we you agree that the door on the 5th Right was a wooden door—was it not a canvas door with a wooden frame? A. As well as I remember, I would not want to say, but I think it was a wooden door.

[14744. Mr. Robinson.] Perhaps you are right.

14714. *Mr. Lysaght* [Q] Where else was there a single door? A. Well, there were the single doors at the 4th Right.
 14715. Q. I think that was a narrow door? A. Yes.
 14716. *Mr. Atkinson* [Q] There were two doors?
 14717. *Mr. Lysaght* [Q] One on the 4th Right, and one on the cut-through below that? A. Yes.
 14718. Q. The disadvantage of any one of these single doors, that is, either the one at the 4th Right, or the one at the cut-through below the 4th Right, would have had the effect of forcing the intake of air straight into that room in the travelling road? A. Partially so.
 14719. Q. And cutting off the supply of air for the whole of the men up 'V. 1 to the left? A. To some extent.

[At 1 p.m. the Commission adjourned till 2 p.m.]

Afternoon.

[On resuming at 2 p.m., Mr. W. R. Pratt attended to take shorthand notes of the evidence and proceedings.]

Mr. ALFRED ASHLEY ATKINSON.

Previously sworn, was further examined, as under—

Cross-examined by Mr. Lysaght.—

14720. Q. You were speaking about single doors. If either of those doors at the 4th Left, or the 4th Right, should become damaged, the air would start coming into the travelling road and not go to the men? A. Do you refer to the doors between No. 1 main level and the travelling road.
 14721. Q. Yes? A. A portion of the air would go through.
 14722. Q. So that with the two doors at the 4th Right and the cut-through below the 4th Right, and the two doors, one on the 4th Left and one on the 4th Right, there were four single doors at which the ventilation of the whole of the plant in the shaft No. 1 main level, depended upon. That is the ventilation depended upon any one of those four doors? A. Well, I do not know that the doors on the 4th Left were single doors, but to the best of my knowledge the other two doors you referred to were single doors.
 14723. *Mr. Bruce Smith* [Q] I asked that we should be supplied with a map from the mine showing the position of the ventilation just before the explosion, but we have not got it yet.
 14724. *Mr. Atkinson* [Q] Do the maps from the Mines Department show the ventilation? A. No.
 14725. *Mr. Bruce Smith* [Q] I ask Your Honor to give direction that plans shall be supplied from the mine showing the method of ventilation immediately prior to the explosion. Here is an instance of the necessity for it. *Mr. Atkinson* is only able to speak from what he knows.
 14726. *Mr. Atkinson* [Q] I suppose the mine has a record of that information?
 14727. *Mr. Bruce* [Q] I have taken a note of it.
 14728. *Mr. Atkinson* [Q] It could be shown on one of the lithographed plans of the Department.
 14729. *Mr. Atkinson* [Q] It would be useful if a reliable plan could be produced, but at the same time it must be remembered that the information must be based on the recollection of somebody.
 14730. *Mr. Bruce Smith* [Q] There is a surveyor at the mine since November it is to survey and record on a two days by the management all the changes that are made. They know the data there. They can show us one of these lithographed maps of the apparatus they have for ventilating the mine.
 14731. *Mr. Atkinson* [Q] The plan of the mine usually shows the development work but not the doors, but those could easily be put on because some of the officials know where the doors are, and how the ventilation is conducted.
 14732. *Mr. Bruce Smith* [Q] I do not think it would take long for them to do it.
 14733. *Mr. Atkinson* [Q] It would be done in half a day.
 14734. *Mr. Lysaght* [Q] It is clear that the ventilation of the mine to the left of No. 1 main level depended on at least three doors. That would be one on the 4th Right and the one below it, and the one on the 4th Left? A. To a certain extent.
 14735. Q. Well, if any one of those doors became damaged as a result of the fact that the return airway was in the back heading, would not the greater proportion of air escape into the return airway? A. Well, a portion of would, I do not know whether it is a solid or the greater portion.
 14736. Q. Would not the greater drag be down that return airway instead of through the working faces? A. The greater drag would be round the faces.
 14737. Q. The drag would be round the faces, but the tendency to escape would be down the return airway, would it not? A. Between the point where the doors are fixed and the ventilating furnace, there does not appear to have been much difference in the distance the air would travel.
 14738. Q. My recollection is that half the air escaping would be a fair estimate? A. I think probably half, that is, if the door was open to its full extent.
 14739. *Mr. Bruce Smith* [Q] The door would require to be opened to its full extent? A. The door would require to be wide open.
 14740. Q. And if it were only three quarters open the volume of air would be reduced? A. Yes.
 14741. Q. If the door were wide open the maximum amount of air which would escape would be half? A. Yes.
 14742. *Mr. Atkinson* [Q] That is the door connecting the return with the intake airways? A. Yes.
 14743. *Mr. Atkinson* [Q] That is a matter which could be easily ascertained. It would be easy to open the door and try the experiment. A. Yes.
 14744. *Mr. Lysaght* [Q] Was the failure to have double doors at the 4th Right evidence of bad management? — [Interposed].
 14745. *Mr. Bruce Smith* [Q] I thought that the Commission had heard the use of the term "bad management."
 14746. *Mr. Atkinson* [Q] The term "bad management" is not as reprehensible as the term negligence, but perhaps it is going a little too far. Could not Mr. Lysaght ask the witness what he would do himself?
 14747. *Mr. Lysaght* [Q] That does not carry the matter far enough.
 14748. *Mr. Atkinson* [Q] If you were to ask what the witness thought good management, that could hardly be objected to.
 14749. *Mr. Lysaght* [Q] That would not establish what I want to establish.
 14750. *Mr. Bruce Smith* [Q] Bad management "is a very elastic phrase."

14798. Mr. Lysaght: Q Last safe to trust a single door to guard against an escape of air in the main intake? A Well, I think it would have been more prudent to have had double doors.

14799. Q Do you say it is not safe to trust a single door to prevent an escape of air from the main intake? A No, it is better to have double doors.

14800. Q On your inspection of the mine did you see that there were only single doors guarding that intake? A I do not know whether I saw through those places or not. I might have been there.

14801. Mr. Lysaght: Q Was this inspection prior to the accident? A Yes, but I do not remember whether I saw those doors, but I might have seen them.

14802. Mr. Lysaght: Q Do you remember going up No. 1 main level before the disaster? A Yes.

14803. Q Did you look to see whether the doors between the back heading and the main level were single or double doors? A I do not think I did.

14804. Q Had you known that there were single doors, would you have considered it essential to have ordered double doors? A Yes, I think I would.

14805. Q And, in your opinion, ought your inspectors, had they known them to be single doors, also to have recommended double doors? A Yes, I think so.

14806. Q They will now say that the failure to provide double doors to guard the main intake, shows evidence of defective management—

14807. Mr. Bruce Smith: There is no question.

14808. Mr. Lysaght: Mr. Bruce did not say the term could not be used.

14809. Mr. Bruce: Mr. Lysaght and it would be better to have double doors; the Commission can draw its own conclusions.

14810. Mr. Bruce Smith: Other witnesses may be asked the same question, and their ideas as to kind of defective management may be different. In a sensible inquiry we should employ workable phrases.

14811. Mr. Bruce: Surely it is essential that the witness say it would be a proper thing to provide double doors under the circumstances.

14812. Mr. Lysaght: Q In your opinion, were the inspectors negligent in not ascertaining—

[interrupted].

14813. Mr. Bruce: There is the old phrase again.

14814. Mr. Lysaght: I put the inspectors this way.

14815. Mr. Bruce: It is the same thing.

14816. Mr. Lysaght: If your Honor thinks that I should not pursue this matter further I will not do so.

14817. Q Have you got those reports of Mr. Bruce which I asked for? A They are here.

14818. Q Have you read them since I asked the question? A Yes I have.

14819. Q Is there any reference to the dusty conditions of Kenville on them? A I do not think so.

14820. Q Then your answer earlier was correct? A Yes.

14821. Mr. Bruce: Q Why I ask whether the notes which were made by Mr. Bruce at the time of the disaster were found? A Mr. Bruce has the notes.

14822. Mr. Bruce: Q And he said as a report? A He could have his notes as a pocket book.

14823. Mr. Bruce: Q Probably they would be in existence? A I think so.

14824. Mr. Lysaght: Q Mr. Bruce is at present doing work as an inspector? A He is not doing any underground work.

14825. Q I could work as an inspector? A He is doing work for the Department.

14826. Mr. Bruce: Q What is he doing? A He is looking after the record findings in connection with some of the witnesses, and is doing a little clerical work.

14827. Mr. Lysaght: Q Did he not go to one of the witnesses at Hefandi yesterday morning? A He would probably go to the Colliery office.

14828. Q If he is capable of doing work as an inspector, surely he can give evidence here? [No answer.]

14829. Mr. Bruce Smith: Now, you are assuming that he is doing work as an inspector. He is not inspecting.

14830. Mr. Bruce: Mr. Bruce may not be, under the circumstances, fit to go underground, and possibly he may not be fit for some years, but he may be competent to speak as to facts that occurred.

14831. Mr. Bruce Smith: I would ask Your Honor to see him personally previously. I will be quite content with that.

14832. Mr. Bruce: Coming into a Court like this, where there are only a few people, is not like going into a crowded Court.

14833. Mr. Bruce Smith: Will Your Honor say him?

14834. Mr. Lysaght: Might I suggest that he be formally subpoenaed?

14835. Mr. Bruce: A subpoena would not be necessary, first, perhaps, it is as well that he should not be subpoenaed.

14836. Mr. Lysaght: Might we have that book produced?

14837. Mr. Bruce Smith: If you want it you can have it. It is the material on which his report will be based, and it might be of use to the Court.

14838. Mr. Lysaght: Q In your letter to Mr. Bruce of Fifth May, 1930, you referred to a general oversight in which you had with him. Do you remember whether on that occasion you told Mr. Bruce about the danger arising from coal dust being allowed to accumulate? A I cannot remember.

14839. Q Can you remember any notice in your correspondence that would bear any bearing subsequently on the disaster? A Well, I can only refer from the contents of the letter that probably these subjects formed part of the conversation.

14840. Q That is the subject of the danger of coal dust being allowed to accumulate? A That is one of them—and that danger.

14841. Q And also the necessity for watering? A I do not remember to what extent that might have been mentioned at the time.

14842. Q You have no recollection of any of these conversations? A I do not think I have.

14843. Q You might tell me whether you have written any further letters to Mr. Bruce beyond those you produced at the request? A I have written some other letters.

14844. Q Do they bear on the watering question or on the dust question? A No, I do not think they do.

14845. Q Or upon any danger apparent in the Kenville Mine? A Well, I forget the subject of all the letters.

14846. Q You have signed? A Yes.

Witness: A. A. Atkinson, 10 February, 1933.

- 14534 Q Is there any objection to producing them? A No.
- 14535 Mr. Lynam? Right I see, your Honor, that all the letters sent by Mr. Atkinson to Mr. Rogers shall be produced.
- 14536 Mr. Brown Smith? If they bear on the condition of the mine, they may be produced.
- 14537 Mr. Brown? Q They are business letters, I suppose—official communications, is that right? A Yes.
- 14538 Q And there could be no objection to their production? A I see no objection as far as I know.
- 14539 Mr. Lynam? Q Will you have the letters which containing these letters produced? A If I can get a transcription sent to the office, you can have it to answer.
- 14540 Mr. Brown Smith? I beg to tender the reports of the District Inspector of the inspections of the Mount Kemble Colliery for the years 1931-2. (Reports put in, and marked "Exhibit No. 10 and 11.")
- 14541 Mr. Brown? Is there only one report for 1931?
- 14542 Mr. Brown Smith? Yes.
- 14543 Mr. Atkinson? Q Can you understand the extracts which are alluded to in this report? A I think so.
- 14544 Q He says, "The working places were in good condition and a plentiful supply of timber on the various lifts. Daily repairs are made on the state of the working places previous to the men commencing work, and also on the machinery, &c." How do you interpret that term "working places"? Do you think Mr. Brown means the men working there daily? A I think the word "daily" would include those only actually working.
- 14545 Mr. Brown? Q Can you gather from this report, the total amount of air going into any part of the mine? A I think not.
- 14546 Q The amount of air at that particular time? A Yes, the amount of air at that particular time.
- 14547 Mr. Lynam? Q Can you tell me from the last report the amount of ventilation going up No. 1 main level at that particular time? A It is not very easy to distinguish from the report between the main tunnel and No. 1. Of course, I may mention that this is the last inspection of the Mount Kemble Colliery made by Mr. Bates, and he may have got hold of some wrong terms in connection with the district.
- 14548 Q Do I understand that you cannot tell us? A I cannot from the report.
- 14549 Q And apparently Mr. Bates, if he had the information, did not put it into this report? (No answer.)
- 14550 Mr. Brown Smith? How can he witness any?
- 14551 Mr. Lynam? Q When is it a No. 3 Right that he witnesses? A I take it that it is No. 3 Right of the main tunnel.
- 14552 Q When is No. 3 Right mentioned—it is not apparently mentioned here at all? A I think that would be No. 4 Right, I do not know.
- 14553 Q Had No. 3 Right been broken off at all at that time—off No. 1 main tunnel? A Yes.
- 14554 Q With regard to No. 4 Right he says: "There are 40 men, 2 boys, and 3 horses—total, 45—now supplied with 18,000 cubic feet of air per minute, giving each an average of 160 cubic feet." That would not be the 34 Right? (No answer.)
- 14555 Mr. Atkinson? There are too many of them.
- 14556 Mr. Lynam? Much too many. I would like Mr. Bates return by No. 3 Right.
- 14557 Mr. Atkinson? That is of the main tunnel, but I think we had better wait until we get the ventilation report from the mine.
- 14558 Mr. Lynam? Q Well, this is Mr. Bates' report. Considering you do not know to what parts of the mine he refers, and you cannot tell us from it the amount of air going up No. 1 main level—how did you know what sort of air the men were getting at Kemble? A I know from that report that the men working there were getting more than the minimum quantity required by the Act. It is quite impossible for me to know the weights and numbers of the men during 1932 from Mr. Bates? A He would probably have made one on the day that he was inspecting the mine had he not been injured.
- 14559 Q Is the other report for 1931? A Yes.
- 14560 Q Do you only get annual reports? A No.
- 14561 Mr. Atkinson? There are three reports here for 1932.
- 14562 Q I want to ask you about the gas in that back heading. Do you know whether there was any leakage from the back cut-through up to the door? A Yes, there was.
- 14563 Q Did you see it? A Yes.
- 14564 Q Before the disaster there was leakage from the back cut-through right up to the door? A They do not usually put it right up to the face. It was within a reasonable distance of the face.
- 14565 Q I think you told us, when you examined the door on the 5th day that it had been left open by some of the rescue party? A Yes.
- 14566 Q Who told you the rescue party left that door open? A I could not say that. It was some of the party who were in the mine at the time.
- 14567 Mr. Brown Smith? Q Which door was that? A A wooden door on the 5th Right.
- 14568 Q I was the first man to go through that door, and I was in a position to remember that.
- 14569 Mr. Lynam? Q You hear that? A The door was open, and I understood that it had been left open by rescue party.
- 14570 Mr. Atkinson? Q The door was open when I went there a couple of hours after the explosion? A That is in accordance with what I say.
- 14571 Mr. Lynam? Q In your evidence at the inquest, you stated: "The door between the No. 1 main level and the back level, on the No. 3 Right rope road was open, and I understood had been left open by some of the rescue parties, in order to short-circuit the air with a view to the more speedy recovery of some of the bodies." Do I understand that it was open when the first rescue party went to—
- 14572 Mr. Atkinson? I was there two hours after the accident, and it was open then.
- 14573 Witness? I think that the door was found open by the rescue parties and was left open by them, as Mr. Atkinson heard it.
- 14574 Mr. Lynam? Q Do you assume that the door was blown open by the explosion? A Probably.
- 14575 Q It was not blown off all supports at all? A No.
- 14576 Q It opened in the usual way—that was towards the travelling road? A Yes.
- 14577 Mr. Atkinson? Q That is not the usual way—it opens the other way? A Yes, I see it opens towards No. 1 level.

14452. *Mr. Leary* [Q] Was the door open in the ordinary way that it opens? (No answer)
14453. *Mr. Robertson* [Q] The door is opened by the steps? A Yes
14454. [Q] Therefore it opens towards No. 1? A Yes
14455. *Mr. Leary* [Q] It appeared to be perfectly free, and on its supports, and not in any way damaged? A I could not say that. It was in the hinges. The breaking at the side of the door was diagonal.
14456. [Q] The door itself was not moved out of its ordinary position? A No, I do not think it was.
14457. [Q] Then that door having been blown open in the ordinary way, did it not indicate that the force came from the travelling road, west? A There was considerable force on either direction.
14458. [Q] But I am taking this particular evidence of force? (No answer)
14459. *Mr. Moore* [Q] We should like to have it explained how that door was opened. Mr. Robertson found it open. I understood that it was a door which closed of its own accord.
14460. *Mr. Leary* [Q] Was that an ill-omened door? A I think so.
14461. [Q] What stopped it from closing? A There would be a good deal of material blown about from the explosion, which came in the way of it and prevented it closing.
14462. [Q] Material on the floor? A Yes
14463. *Mr. Bruce Smith* [Q] Do you mean part of the building round the door? A There may have been part of that in the way.
14464. *Mr. Moore* [Q] You mean from over the door, it would not blow in from the joints of the door. It would be blown in from No. 1 level.
14465. [Q] The door matches to the roof? A Yes
14466. *Mr. Bruce Smith* [Q] Is there anything shown on these sectional plans about the door? A I do not think so.
14467. *Mr. Leary* [Q] That door having been blown open, the matter which would blow it open would come from the left travelling road direction. It could not be kept open by staff blown from the main level, because that would force it to shut? (No answer)
14468. *Mr. Robertson* [Q] Is it not a fact that stuff from that door was blown towards the 36 Right? A It was blown towards the east.
14469. [Q] Is it not a fact that large quantities of dust, broken glass, and rubbish, were blown in an easterly direction? A There was a large quantity of material blown in that direction.
14470. [Q] Did you observe two men going down towards No. 1 main level? A On the 26th night.
14471. [Q] Yes. A I cannot say I did.
14472. [Q] On the 26th night there was an accumulation of bed linen, cloth, dust, and other things? A The steps may have been removed in order to allow of the bodies being taken away.
14473. *Mr. Leary* [Q] This is clear—that the door was blown open from the travelling road in a westerly direction? A If my recollection serves me right, that is so.
14474. [Q] Would not that indicate that the force came down from the back heading from the travelling road? A I do not think so.
14475. *Mr. Robertson* [Q] Is it certain that the door was blown in a westerly direction? A So far as I remember, it was open in its ordinary way.
14476. *Mr. Robertson* [Q] I cannot recollect myself, although I was first to see it.
14477. *Mr. Ryker* [Q] How you say notes about the condition of that door? A I have no notes as to the way in which that door was open.
14478. *Mr. Robertson* [Q] It is possible that the door, opening in the ordinary manner to the west, might be blown by force to the east? A That is possible, of course.
14479. [Q] You remember the disturbance in the supports of the door,—the doors were blown a terrible distance to the east? A I know the backing corners of the door were blown to the east.
14480. [Q] The same force might blow a door, ordinarily opening to the west, to the east? A It might.
14481. *Mr. Bruce Smith* [Q] If a door usually opened one way, and was blown the other, the damage most of the hinges would be such that it might stick? A It might.
14482. [Q] You are quite sure that the material about the door was blown to the east? A Yes.
14483. *Mr. Leary* [Q] What I want to establish is this—when that door became damaged, the men at the foot of all the working planes to the left of No. 1 were deprived of their air supply? A Certainly so, after the explosion.
14484. [Q] I think from the fact of that door being damaged? A Not altogether, without the explosion.
14485. [Q] Do you not see that the air, though open in the return air shaft? A I see that.
14486. [Q] The roadway would be full of the air to go down the return airway? A Not all of it.
14487. [Q] The greater portion of it? A I do not think so.
14488. *Mr. Ryker* [Q] Are you sure about the door at the east through on the 36 Right being a wooden door, or was it a canvas door? A It was a wooden door.
14489. [Q] The one in the east through near the 36 Right rope road? A Well, I am not quite sure about the material.
14490. *Mr. Leary* [Q] The door was an indication of force,—it would be material to show it exactly? A Yes.
14491. [Q] It would be material to know whether it was a canvas or a wooden door? A Yes. So far as I remember, it was a wooden door.
14492. [Q] Where ships pass through, there are canvas doors, are there not? A It depends on the position. Many of them pass through wooden doors.
14493. [Q] I don't know whether Mr. Robertson remembers whether this door was a canvas or a wooden one.
14494. *Mr. Robertson* [Q] I think it was a canvas door. The only man who could give any evidence about that would be Moore.
14495. *Mr. Leary* [Q] I think he said it was a wooden door.
14496. *Mr. Moore* [Q] Had the ships that came out of the 36 Right level could by the 36 Right rope road and the east heading? A Yes, the empty ships went in at the 26 Right.
14497. *Mr. Robertson* [Q] They would be loaded by it at the time they came out? A Yes.
14498. *Mr. Bruce Smith* [Q] How far back would you like copies of the letters written by Mr. Allison to Mr. Rogers?
14499. *Mr. Leary* [Q] There are not many.

Witness—A. S. Adams, 10 February, 1966.

14023. *Mr. Bruce Smith* [Q] How many would there be in a year? A. Not many in a year.
14024. *Mr. Bruce* [Q] Would there be half a dozen altogether? A. Perhaps there would be a dozen.
14025. *Mr. Bruce Smith* [Q] Oh, you had better know that.
14026. *Mr. Spangler* [Q] Do you know whether there was any leakage in the back not being worked to the left of No. 1? A. I do not remember.
14027. [Q] In the absence of leaking, and in view of the fact that there had been a hot dump in some of these tanks— [Interrogated]
14028. *Mr. Spangler* [Witness] When?
14029. *Mr. Spangler* [Q] After the explosion. In the absence of bottling, these tanks would most probably have contained a small accumulation of gas, before the disaster? A. That is possibly so.
14030. [Q] It is not more than possible. Is it not probable? A. There may have been a small accumulation of gas there.
14031. [Q] Do you say probably? A. You mean if there was no bottling?
14032. [Q] Yes? A. I would not say it was probable.
14033. *Mr. Roberts* [Q] Is it probable there would be no bottling? A. I think it would be probable that there was bottling.
14034. *Mr. Spangler* [Q] I understand that Morrison said that there was no bottling past that cut-through, in the left section, near to where Morris was working.
14035. *Mr. Roberts* [Q] He misinterpreted you.
14036. *Mr. Spangler* [Q] I asked Mr. Adams if there was bottling right up to the top of the cut-through in the heading—that is the cut-through above where Morris was working, and he said there was bottling there.
14037. *Mr. Adams* [Q] There is no chimney for any leakage.
14038. *Mr. Spangler* [Q] Was there any leakage to take the air from Morris' place to the top of the cut-through? A. No.
14039. *Mr. Bruce Smith* [Q] I have looked up the air through by Morrison at the present is reference to that does. On page 15 he says— "There is another door on the 5th Right, that door was intact, but the slippage was down to the same direction as the previous door I spoke of, that is to the right."
14040. *Mr. Roberts* [Q] He does not say which way it was down? A. No.
14041. *Mr. Spangler* [Q] Nor whether it was a wooden door or a canvas door? A. No.
14042. *Mr. Bruce Smith* [Q] The door is afterwards of two canvas doors as if in destination.
14043. *Mr. Spangler* [Q] Where did you get that 80,000 cubic feet of air from, as being supplied in the Kumbia mine? A. The ventilation look at the gallery shows that it comes between 50,000 and 100,000 cubic feet.
14044. [Q] Do you mean to say that there is a tunnel in the ventilation look of 80,000 cubic feet of air going into the Kumbia mine? A. I will not swear to it. I have seen a record by the check inspectors for 100,000 feet.
14045. [Q] Where shown in the check inspectors' report book—is Mr. Wynn's report book? A. I forget whose book it was.
14046. [Q] Were not the figures supplied by the Manager in his return as between 50,000 and 75,000 as being the value of air? A. I do not remember just now.
14047. [Q] Does not your own Inspector's report show what it was in April—the actual intake? A. I think we can get it by adding the figures together.
14048. [Q] Would it take you long to add them together? A. No. I see the total is 57,500 cubic feet.
14049. [Q] Now, can you show me those reports which mention 50,000 to 100,000 cubic feet? A. If I had the reports here I could.
14050. [Q] Is not the amount stated a fine average for it? A. It depends where the air was measured. A great deal more than that may have been going into the mine.
14051. *Mr. Roberts* [Q] Mr. Bates does not appear to have given the total intake, or the total return? A. No.
14052. [Q] Is it not usual to give the total? A. I think it is usual.
14053. [Q] This is right enough to show whether the maximum quantity of air was supplied, but it is a matter of interest, and it is desirable, to have the total intake? A. Quite so.
14054. *Mr. Bruce Smith* [Q] That shows a large surplus over the maximum? A. It averages from 250 cubic feet to 400 cubic feet per man.
14055. *Mr. Spangler* [Q] That is no surplus by taking the air at one split? A. It is not taken at the working places.
14056. [Q] They take the number of men and the number of horses at the different splits, and also take air passing to supply them? A. Yes.
14057. [Q] In this is looking at the plan of the Murray shaft—would not the presence of the intake air on the downcast heading rope road, and along the 5th Right rope road, have the effect of circulating more or less a current of air through the shaft? A. I think there may be a small extent be a circulation of air round the edge of the shaft.
14058. [Q] Would not the presence of these two intakes have the effect of preventing any small accumulation of gas on the return airway on No. 1 travelling road? A. If gas had accumulated on the edge it would have that effect.
14059. *Mr. Roberts* [Q] As a matter of fact it did not, because black damp was found there? A. Yes.
14060. *Mr. Spangler* [Q] Was not the air circulating there? A. The air was not circulating through the shaft.
14061. *Mr. Roberts* [Q] It takes a good long time of atmospheric air to remove black damp on account of its specific gravity? A. Yes if it is large quantities.
14062. *Mr. Spangler* [Q] We may take it that that gas was not at all vented? A. Certainly it was not.
14063. [Q] Therefore, if any gas was present in that shaft, either from the pillars or the struts, or any place else, it would remain there? A. It would rise to the highest parts.
14064. [Q] And it would be there as a constant source of danger until there was a fall to force it out? A. Yes, if there was gas there it would be a source of danger.

14067. Q I ask you now if you have any further authority for saying that gas exists in the sandstone strata? A I have not. I know I have said it.

14068. Q You know that that was sandstone strata? A It was partly shale, partly grey sand, and partly sandstone.

14069. Q It was not likely to contain gas? A Sometimes it does.

14070. Q Was the strata of Kanabla such a strata as would be expected to contain gas? A So far as I know, it has not given off gas previously.

14071. Q Would it be such a strata as would be expected to contain gas? A I know a strata of the same character that has occasionally contained gas. I cannot say that it is a strata that one would expect to contain gas.

14072. J. A. Atkinson. Q You know that you say here shale or sandstone lands,—is it the sandy lands or the shale lands of material which actually give off gas? A The gas is more frequently in the shale.

14073. Q The sandstone—it is a sort of soft, impure sandstone, is it not? A I do not remember what it was there, it varies in different parts.

14074. Mr. Atkinson. Q Would you not describe it as a shaly sandstone? A I think that would not be an appropriate description of it.

14075. J. A. Atkinson. Q It is very hard at first, but comes to pieces on exposure to the air, so if it is a shaly sandstone? A That would be correct.

14076. Mr. Atkinson. Q That sandstone would not contain gas? A Sometimes it does.

14077. Q Can you give any more in this Colony? A The strata above a seam of coal in the Newcastle district gave off gas like this. There are shales and sandstones there as well as here.

14078. Q You told us of the great danger arising from using blasting powder? A Under certain conditions.

14079. Q Did you make any suggestion in the management of Kanabla that they should not use it? A Only by means of the annual report of the Mines Department, where I called attention to the patented explosives.

14080. Mr. Bruce Smith. Q Did you not send out a circular? A Yes, the conclusions of the Royal Commission on Coal dust, and that had attached to it a list of patented explosives.

14081. Mr. Atkinson. Q Like that have you? A Not the one mentioned by Mr. Bruce Smith.

14082. Mr. Atkinson. Q Did you point out in the management of Kanabla the danger of using this blasting powder, and suggest the use of a safer explosive? A I sent out a circular containing the conclusions of the Royal Commission on Coal dust, together with a list of the patented explosives in England.

In addition to that, I called attention to the question of explosives in the annual report of the Mines Department, but I did not send any other circular round to the colonies or reference to the matter.

14083. Q You know they were using this blasting powder at Kanabla? A I do.

14084. Q Did you not consider it dangerous? A Not if they observed the precautions published in General Rule 22.

14085. Q You know that Mr. Rogers stated that he did not observe those precautions? A I do not think so.

14086. Q I understood that he did not water in the vicinity of a shot? A He did not state that he did, not water in a dry and dusty place.

14087. Q He did state that he did not water in the vicinity of a shot? A Yes.

14088. Q Did you not consider, in view of the further explosion, and the danger of coal dust, that you should have stopped the use of this blasting powder? A I could not do that.

14089. Q Could you not make a suggestion that they should use another kind of powder or explosive? A I think that the sending out of those circular might be termed a suggestion.

14090. Q Did you ever inquire whether any of those suggestions had been carried out? A I know that they were among the suggestions.

14091. Q You never at any time suggested any amendment in the Act to provide for the greater safety of coal-miners? A No, you mean in the Coal Mines Act?

14092. Q Yes, I have.

14093. Q How long ago? A I suggested an amendment to General Rule 6, as to the use of safety-lamps.

14094. Q That is upon the Kanabla disaster? Q No, it is not.

14095. Q To whom did you make the suggestion? A In the annual report of the Mines Department.

14096. Q Do you refer to the passage of which I began?—

It is rather for regret that arrangements have not been completed at the colliery for the use of safety-lamps.—

A I do not refer to that.

14097. Q What report is it? A In the 1901 report, I think.

14098. Q Is that the answer?—

General Rule 6, section 42, of the Coal Mines Regulation Act, is not satisfactory in regards the use of safety-lamps. The same applies to the rules in Great Britain, where a long time has been recommended the substitution of the following:—No lamp or light or any kind of a light or safety lamp shall be used in any mine or in a shaft or in a tunnel after the date of the giving of any notice of reference to any mine or in which there is likely to be such a quantity of inflammable gas as to render the use of naked lights dangerous. All safety lamps shall be checked, examined, maintained, lighted and looked in a proper lamp room on the surface before being used in the mine. All safety lamps shall be provided with built-in apparatus of strong construction to prevent explosion. It is the rule of this department was adopted in place of General Rule 6 it would be more satisfactory, in the emergency for the adoption of safety-lamps is much more than a half-dressed measure.

Is that it? A Yes.

14099. Q Is that the only suggestion you have made since you have been Chief Inspector for the mines, under all the Coal Mines Safety Act? A Yes, I believe it is.

14100. Mr. Bruce Smith. Q You did not read the portion of the suggestion.—“It is to be regretted that considerable attention to the use of safety lamps is still displayed by the mines, managers, and workmen in connection with accidents where small quantities of fire-damp are more or less regularly given off.”

14101. Mr. Atkinson. Q We have had off a boat that before.

14102. Q Is there not a greater danger from coal dust than from failure to use safety lamps? A Under certain conditions.

14103. Q Why did you not make a recommendation as to an amendment of the law regarding the watering of mines? A I do not know why I did not.

14104.

- 1849 Q Why did you not make a suggestion as to the amendment of the law regarding the use of certificates? Q I brought the matter before the morning assembly, and I remember that I did my duty. It is not within my power to amend the law.
- 1890 Mr. A. A. Hildes: Q I suggest these matters were brought under the name of the Minister? A. These suggestions form part of the annual report.
- 1891 Q And were before Parliament? A. Yes.
- 1892 Mr. A. A. Hildes: Q The certificates which you have come before the Minister before you issue them? A. Yes.
- 1893 Mr. A. A. Hildes: Q Do you know anything about an explosion which occurred on the ship "Glenn"? A. I do not remember.
- 1894 Q I have proposed to Mr. A. A. Hildes, through some of the recommendations which have been made. You know the fact, recommendation, which is that "Managers, under no circumstances, deputies, and clerks should hold certificates of competency by examination?" Do you remember it was in those persons who simply held certificates of service to tell evidence to act as managers of railways? A. Yes.
- 1895 Q I think you said that many capable managers would be too old to qualify for certificates? A. Yes.
- 1896 Mr. A. A. Hildes: Q He said that there was another method by which Managers who had certificates of service could be arranged for any neglect of duty.
- 1897 Mr. A. A. Hildes: That is exactly the Manager who is actually at work.
- 1898 Mr. A. A. Hildes: I And who has probably brought about some disaster.
- 1899 Mr. A. A. Hildes: Q I think it that you have some persons in your mind when you were thinking of as being too old to qualify when you made that statement with reference to their qualifications? A. Yes.
- 1900 Q You can tell me what Managers you know of who you regard as being too old to qualify for certificates? A. I do not see why I should go into the personal qualifications of the various Managers.
- 1901 Q Might I ask you if you consider that Mr. Rogers is too old to qualify for a certificate? A. Yes.
- 1902 Mr. A. A. Hildes: Is this question allowable? A. Yes.
- 1903 Mr. A. A. Hildes: No. I think it is going outside the scope of the inquiry.
- 1904 Mr. A. A. Hildes: Q Do you know how certificates of service were obtained? A. Yes.
- 1905 Q Do you know whether any evidence was given on oath that those persons had acted as Managers for a certain length of time? A. Yes.
- 1906 Q Were you in the State at the time? A. Some certificates have been obtained since I came here, but others were issued before I came.
- 1907 Q Do you know whether, before they are obtained, evidence is given on oath as to the length of service? A. No, I do not remember, sir.
- 1908 Q Is there any regulation bearing on that matter? A. Do you mean as to giving evidence on oath? A. Yes.
- 1909 Q Does it not lie entirely in the hands of the Minister whether he chooses to issue certificates of service or not? A. There are certain qualifications which are necessary before a certificate is granted.
- 1910 Mr. A. A. Hildes: Section 6, subsection 6, provides for a statutory declaration.
- 1911 Mr. A. A. Hildes: No doubt someone has to be satisfied.
- 1912 Mr. A. A. Hildes: The question is, what proof is there that the applicants have complied with the points as laid down in the statute.
- 1913 Mr. A. A. Hildes: Q What is there anything which compels applicants to prove that they are entitled to obtain service certificates? A. I am not aware that there is anything.
- 1914 Q That being so, the Minister can issue certificates to any persons who apply, and who make a statement that the conditions have been fulfilled. [No answer.]
- 1915 Mr. A. A. Hildes: I see that it is for the Minister to be satisfied.
- 1916 Mr. A. A. Hildes: Q Then the Minister can issue a certificate by the mere statement of a man that he has been a mining manager for five years within twelve months of the passing of the Act? A. Yes, as long as the person supplies a statutory declaration as to the number of men employed in the mine.
- 1917 Q Do you know that in this case certificates were issued to the Managers of one railway, which he said he had arranged, and that another Manager applied in respect of services for the same railway? A. I am not aware of such a case.
- 1918 Q Did you ever hear of a certain length of time for service being set up by a Manager who got his certificate, and of another Manager coming on and setting up the same time as anything but to get a certificate? A. No. I did not.
- 1919 Mr. A. A. Hildes: I think that if there are any cases of the kind that Mr. Lyngby should come down, and let the papers come down.
- 1920 Mr. A. A. Hildes: It is hardly a case which goes into particular cases.
- 1921 Mr. A. A. Hildes: If the Court thinks that a system has been shown it might make suggestions to remedy that system for the future.
- 1922 Mr. A. A. Hildes: The system provided under the Act is rather a loose one, it certainly seems a very lucky position.
- 1923 Mr. A. A. Hildes: I understand it is a copy of the English provision.
- 1924 Mr. A. A. Hildes: Q You know that a man can get a certificate now for services rendered, although he may not have been a Manager since 1885? A. Yes.
- 1925 Q In your opinion should that provision be abolished? [No answer.]
- 1926 Mr. A. A. Hildes: It is hardly worth while pursuing this matter further.
- 1927 Mr. A. A. Hildes: Q Regarding this oral examination which you support for disqualification—you would also require that? A. Yes.
- 1928 Q Why do you propose an oral examination and not an examination in writing? A. Well, I think you might be able to get more very efficient men for those duties, who would not be able to do much on a written examination.
- 1929 Q Could you not have both? A. You could have both examinations, but I do not think it is necessary.
- 1930 Q Do you not see that a man might be a practical miner and able to answer orally certain questions put to him, but he would not be able to make proper reports of the various matters which might come under his notice unless he had some education? A. It requires only a very elementary level of education to make the reports required from a deputy.

19543. Q. That is if everything is going on all right, but supposing that certain conditions in a mine require as he described, is it not essential that he should be able to properly write them down? A. Yes.

19545. Q. Then ought not a person to give evidence that he has the elementary knowledge—should there not be a written examination especially with the verbal examination? A. I do not think myself that it is necessary.

19546. Mr. Robertson: Q. It is necessary that a deputy as a whole should be able to write? A. Yes.

19548. Mr. Lyngby: I do not think that they would appear anybody who could not write, but in some of these reports the spelling is bad.

19550. Mr. Robertson: That does not matter.

19551. Mr. Bruce Smith: Was the grammar sifted?

19552. Mr. Lyngby: There was a constant use of one set of phrases—a stereotyped wording of the reports for months.

19553. Mr. Robertson: If the conditions of the mine are safe, the wording of the reports must be of a stereotyped nature. All that a deputy has to say is that the mine is safe, and if it is not safe he has to say what the defects are. I take it that when Mr. Atkinson states that he does not require a man to undergo a written examination he means no examination as to that man's elementary qualifications.

19554. The witness: Yes.

[The Commission at 4 p.m., adjourned until 10 a.m. the following morning.]

WEDNESDAY, 13 FEBRUARY, 1933

[The Commission met at the Land Appeal Court, Dorchester.]

Present—

C. E. R. MURRAY, Esq., D.C.J. (PRESIDENT).

R. A. W. ROBERTSON, Esq., COUNSELLOR. | D. RITCHIE, Esq., COUNSELLOR.

Mr. Bruce Smith, Barrister at Law, instructed by Mr. Wood, Crown Solicitors Office, appeared on behalf of the Crown.

Mr. A. A. Lyngby, Solicitor, appeared on behalf of—

(a) the representatives of deceased miners, wheelmen, &c., (victims of the explosion);

(b) the employees of the Mount Kembla Colliery (miners, wheelmen, &c.), and

(c) the Illawarra Colliery Employers' Association (the northern Illawarra Union).

Mr. C. G. Wade, Barrister at Law, instructed by Mr. G. J. Bony, Solicitor, appeared on behalf of the Mount Kembla Coal and Oil Company (Proprietors of the Mount Kembla Mine).

(Mr. J. Gurbick, Secretary to the Commission, was present to take shorthand notes of the evidence and proceedings.)

19555. Mr. Lyngby: Before I proceed with my cross-examination, will your Honor permit me to state that I have received a letter from the Delegates Board of the Colliery Employees of the Karrikin District, New South Wales, containing some new recommendations, and requesting the names of all witnesses who are prepared to give evidence in support of the Southern Union's recommendations, and of those new recommendations. I think the better way to have them revealed would be if I read the letter which is not very long, from the Secretary, and then they can be put before Mr. Atkinson in his examination by me.

No. 1.—Agreed to, and to read "All the considerations here to be passed in the State of New South Wales."

No. 2.—Agreed to that, as it stands, but suggest that, when a court reads about safety-lamps going into a mine, the innocent and dark of such chapters against a third party. The persons named to be an Arbitration Court to settle the question what are safety lamps are to go into the mine or not.

No. 3.—Agreed to.

No. 4.—Agreed, saving to the last recommendation.

No. 5.—All out, therefore to be less more than 20 yards.

No. 6.—Agreed to.

No. 7.—Agreed to.

No. 8.—Agreed to, and a 10 "Not less than 200 miles less of no per minute for each man and bag."

No. 9.—Agreed to.

No. 10.—Agreed to.

No. 11.—Agreed to, and add "Instead of monthly, as at present."

No. 12.—Agreed to.

No. 13.—All travelling, main, and horse roads to be 10 feet high.

No. 14.—Agreed to.

No. 15.—Agreed to.

No. 16.—Agreed to, and add "To be not less than 6 feet high, and 6 feet wide—go to be recommended."

No. 17.—We are of opinion that Mr. Rogers, Manager, should be asked in to show one way in which he should not be convicted.

No. 18.—All "That proper machinery be kept in the second shaft ready to lift all employees to the surface within one hour."

No. 19.—Agreed to.

No. 20.—Agreed to.

19556. Mr. Bruce Smith: I do not know what that will be analogous to—whether it is a pleading.

19557. Mr. Lyngby: It is the shortest way I can put it before the Court, Your Honor.

19558. Mr. Bruce Smith: You are everybody is asked to come in, and, in addition to those who have come in already, then a whole lot of names were written to come in.

19559. Mr. Bruce Smith: But the Court does not take a question from anyone people not under oath.

19560. Mr. Lyngby: There are only suggestions, and I suppose they wish to call evidence in support of them.

19561. Mr. Lyngby: I have already told your Honor that no witness's names are given to support these recommendations.

19562

10084 Mr. Eysenck? There is a suggestion here [referring to a book which he held in his hand] about picking up a pin, as far back as 1860.

10085 Mr. Hines? Instead of having a second witness?

10086 Mr. Eysenck? No, with the second witness. Perhaps, if I say it, Your Honor will say: This need not be born down for the reason. [Mr. Eysenck then read from a book.]

10087 Mr. Hines? Is there any suggestion that the present witness is not capable of validating the case?

10088 Mr. Eysenck? The suggestion is this, that, owing to the atmospheric conditions, the air does, frequently, become reversed.

10089 Mr. Hines? That there is a doubt about that.

10090 Mr. Hines? It is when the witness is stopped, the evidence shows.

10091 Mr. Hines? There is a very grave doubt as to whether there has been any substantial reversal. The evidence is very vague and problematical and unsatisfactory as to whether there has been any reversal.

10092 Mr. Eysenck? Of course, there is the affidavit of several of the witnesses as to the places being very hot, and getting no air at all.

10093 Mr. Hines? That might coincide with a fan.

10094 Mr. Eysenck? I see that. I am getting all this now before Mr. Adams on the general communication that Kansas should not be allowed.

10095 Mr. Hines? Is the witness that has been in use for so many years really the second witness suggested there [in the report which was read by Mr. Eysenck], or a different witness altogether?

10096 Mr. Eysenck? It is the second witness suggested here.

10097 Mr. Hines? From what you read just now, I thought it was a different witness, and is a different witness.

10098 Mr. Bruce Smith? I offer an objection of wanting lead to this. Mr. Eysenck is cross-examining Mr. Adams on the evidence which he has given, but Mr. Adams's evidence with regard to his personal knowledge of this case is confined to six years. Unless we know exactly what were the conditions of the case when this communication was made sixteen years ago, how can it possibly be made the subject matter of a cross-examination of Mr. Adams with regard to his evidence as to the testimony of the present witness. It seems to me that it will lead us into a most elaborate inquiry as to the conditions that existed at that time, to see whether the communication at that time seems years ago, have any bearing on the present conditions, and on the opinion expressed by Mr. Adams on the present conditions.

10099 Mr. Hines? It does appear as if Mr. Adams, as an expert, could not speak as to this. It is a matter of history, which occurred long before Mr. Adams had anything to do with the case, and therefore it seems to be other waste of time, and utterly beside the question, for anybody to cross-examine Mr. Adams on it.

10100 Mr. Eysenck? I was anxious to show that the testimony, perhaps, for a lie at Kansas, was recognized sixteen years ago.

10101 Mr. Hines? But Mr. Adams could not speak of that any more than anybody else could. He may have heard from somebody else, merely at second hand, something about the former history of this case. Why he should be cross-examined as to that, and how he could attempt to give any evidence, as an expert, in relation to a question of that kind, I certainly fail to understand.

10102 Mr. Eysenck? Perhaps I did not make the point quite clear. I was anxious to get before the Commission the fact that in 1860 a promise was made by the management of Kansas that a fan would be erected if necessary.

10103 Mr. Hines? It is possible you can get that in the cross-examination of some other witness.

10104 Mr. Bruce Smith? I make this suggestion: If Mr. Eysenck wants to put that fact in evidence, and if it is an official document, I am quite sure I shall offer an objection to its going in before the Commission, but to cross-examine about it seems to be unnecessary.

10105 Mr. Hines? You see only cross-examine about it if the object of your cross-examination, and the fairly possible result of your cross-examination, is to show Mr. Adams's own opinion on a certain question. Now I can do that. I do not know. I should imagine that it would be impossible that it could do so. Shortly, what you might possibly get out of—because somebody and a long time ago something would do at Kansas, do you still hold to the opinion that the shaft now in action at Kansas, the furnace, is sufficient? That is the only thing that I can see that you could wish to put in such a communication.

10106 Mr. Eysenck? I wish to show that Mr. Adams's conclusion that 40,000 cubic feet was the result as of the time was in fact erroneous. I am going to show the statements which the report shows were going into the case.

10107 Mr. Hines? But that can be shown to Mr. Bruce Smith and, from the report itself, if that is it. How can you possibly cross-examine Mr. Adams on what he has been told as some question of history. He is not an historical expert, he is a mining expert.

10108 Mr. Eysenck? Could not I put this on the general ground of cross-examination. No, I, that farmers be prohibited, and have submitted, could not I show that, even at Kansas, when they were thinking of putting up a second furnace, it was found that they would possibly have to put a fan?

10109 Mr. Hines? Yes, but what is the use of cross-examining Mr. Adams as to what he has been told by somebody. That is a matter of history. He cannot say, "I have more reason that anybody else to believe that those statements were true." If he has expressed a strong opinion on a certain matter of science, then you can ask him, "Are you not aware of certain facts?" and "Being aware of those facts, do you still hold to this opinion?"

10110 Mr. Eysenck? I think I would prefer, Your Honor, to put in the whole report hereafter.

10111 Mr. Eysenck? Do you know that the Manager's report from Kansas State of the strike we have not received 60,000 cubic feet? I do not remember the quantity.

10112 Q Do you know that Mr. Randall stated, in evidence, before the Royal Commission, that the average was between 60,000 and 70,000 feet?

10113 Mr. Hines? The same allegation applies there. I take the same line as Mr. Bruce Smith does, that, if the documents themselves are of any use at all, I have no objection to the Court having them. I object to Mr. Adams being asked the question on a manner which he could not possibly have except

Witness—A. J. Atkinson, 11 February, 1903.

except by hearing, through, possibly, lay or free channels. It may turn out that, at that time, there were fewer men, and less not required. I say if the document itself goes in as a matter of history, I have no objection to it. Mr. Atkinson cannot say of his own knowledge.

15114 *Mr. Howe* [He can only speak as a matter of opinion even if that statement has been made by somebody, after having thoroughly examined the whole report, to say what the meaning of the statement is. But, supposing the statement were there, it would have to read the whole report to see the whole thing.

15115 *Mr. Egan* [Do you know that Mr. Knudsen gave evidence before the Royal Commission as the Coal Mines Inspector in 1902? A. Yes.

15116 Q Did you read that evidence? A. Yes.

15117 Q Did he state there, "We try to get the largest quantity of air possible"; the question then is, "What is your average?" and the answer is, "From 60,000 to 90,000 cubic feet per minute"? A. Yes, I have read that.

15118 *Mr. Howe* [Mount Knibble came in at that Commission as merely one of the mines they were speaking of at that time.

15119 *Mr. Atkinson* [The conditions may have changed since then? They may have had other workings in the district.

15120 *Mr. Egan* [But I understand the conditions have not changed.

15121 *Mr. Atkinson* [Nonsense. There must be a change.

15122 *Mr. Egan* [Not to affect the ventilation. I submit that the farther the mine goes in, the less the power of the furnace to ventilate it.

15123 *Mr. Atkinson* [Oh, no, there may be an alteration in the distribution of the air. It may be possible for the furnace to give an increased ventilation, although the area of the workings has increased since. I do not say it is so.

15124 *Mr. Egan* [Q Now, you spoke about an objection from the Water and Sewerage Board to having works in their catchment area? A. Yes.

15125 Q Can you tell me what objection in the South Coast district have the water shaft on the catchment area? A. Mount Knibble, that is the only one.

15126 Q You know that at Mount Koon they are sinking a shaft to avoid a fault? A. I know that they wish to sink one.

15127 Q Is not that shaft proposed to be on the catchment area? A. Yes.

15128 Q Is there any objection to that shaft being put there? A. I do not know whether they have been able to arrange with the Water and Sewerage Board in reference to it or not.

15129 Q Do you know of any objection to it? A. Well, I know the general objection of the Water and Sewerage Board in connection with any mining operations on the surface of the catchment area, but I have not heard any thing in connection with this particular shaft to which you refer. I do not know to what stage it has gone yet.

15130 Q No other colonies but Knibble and Koon would require to have an up-cast shaft on any part of the catchment area? A. It is quite possible that they may.

15131 *Mr. Bruce Smith* [Q What do you mean that others may? A. Yes.

15132 *Mr. Egan* [Q Where? A. South Ball, Gerald.

15133 Q Any other? A. Mount Pleasant, possibly. I could not say what the future might require.

15134 Q Can you produce any letters or anything in evidence showing the objection of the Water and Sewerage Board to these faults on their catchment area? A. Well, I have no doubt, with the permission of the Department, I could produce papers which would show these general objections, but nothing in particular reference to this proposed fault.

15135 Q Now, you are aware, are you not, that a number of persons reside on the catchment area? A. Yes, I understand so.

15136 Q They have farms, and pigsties, and things like that? A. I also understand that they are very particular.

15137 *Mr. Bruce Smith* [I suppose they have rights.

15138 *Mr. Howe* [They get these faults.

15139 *Mr. Bruce Smith* [Yes. They were laid over on the surface.

15140 *Mr. Egan* [Q Do you suggest, as a serious objection to the introduction of faults, that the Water and Sewerage Board may oppose their creation? A. I do.

15141 Q But you have no record of any case in which they have done so? A. I do not know of any case in which they have been asked with reference to it.

15142 *Mr. Bruce Smith* [Q You know the general objection, it has been often expressed? A. Yes.

15143 *Mr. Egan* [Q Well, then, you recognize that it may be more serious here, at Knibble or elsewhere, in having them put up? A. Yes.

15144 Q Will not the objection from the Water and Sewerage Board be equally as good then to say? A. Except in so.

15145 Q Have you got any suggestion as to how you are going to get over that objection then? A. Well, I have already made a suggestion to the Commission, if they could do anything to arrange matters between the Mines Department and the Water and Sewerage Board in connection with this question.

15146 Q Well, now, I will give your Recommendation No. 4. Taking Recommendation No. 5—throughout not more than 30 yards apart—do you in use of any creek, or cove, in the South Coast mines? A. Yes, there have been one or two, I think.

15147 Q Where?

15148 *Mr. Bruce Smith* [Does Your Honor think that that is a proper question to be asked? Does your Honor think that the Chief Inspector of Mines should be asked to publish the knowledge that comes to him in his official capacity in regard to any industry of that sort that may exist in any particular mine?

15149 *Mr. Howe* [Well, on the other hand, Mr. Bruce Smith, is it right, is it fair in the interests of the public and the miners, that any danger of that kind should be kept concealed? It seems to me both ways.

15150 *Mr. Bruce Smith* [Well, I do not know whether it is a danger; perhaps Mr. Atkinson will say I leave it entirely to Mr. Atkinson. I do not know whether it has any bearing whatever on this question.

15151.

15172. Q In the case of the smaller pillars, they have not the same lateral support as in the larger pillars? A No; and I think the fact of such surface of pillars being exposed has a weakening effect as compared with the smaller ones exposed in the larger pillars in which you refer.

15173. *Mr. Howe* | Q It comes to this, does it not, Mr. Atkinson, that by strengthening pillars you might be able safely to take out the same proportion of the whole of the coal as you could not safely take out of the same mine by using smaller pillars? A Yes; I might explain it in this way: the small pillars are sometimes left in such a condition that they are barely able to support the superincumbent strata; but, when the removal of these pillars commences, the effect is to put such a weight on the neighbouring pillars that they are unable to bear it, and frequently many pillars are lost in that way, crushed down entirely, so that large pillars facilitate the getting of a large percentage of coal in the second working of the removal of the pillars, besides any advantage there may be in the first working.

15174. Q But, independently of that, supposing you contemplate the work as one in which you left some pillars behind before taking out the pillars, and to be able to stand only without crushing the pillars that are left, the superincumbent weight to be safely borne by the pillars, it is a fact that, with a given proportion of the coal being taken out a mine may be in a condition of safety with pillars of a certain size, and may be in a condition of safety with pillars of a smaller size,—you see, the horizontal strata being less shattered, the pillars would be stronger? A Quite so.

15175. Q One—the principle—addresses being the actual crushing strength of the pillar due to the smaller or larger proportion of the pillars—the extent of the pressure in relation to the bulk of the pillar is a weakening element? A Yes, Your Honor.

15176. Q If they were smaller, the area of the whole would vary, as the square of the diameter?

15177. *Mr. Bruce Smith* | Is not this another way of putting your Honor's proposition—that the reduction of the strength of the pillar weakens the support in a greater ratio than you reduce the coal?

15178. *Mr. Howe* | Yes. If the pillars were smaller, those strata would vary in the square of the diameter, whilst the pressure would vary directly as the diameter; and, therefore, the smaller the pillar the larger the pressure in relation to the actual contents of the pillar.

15179. *Mr. Buchanan* | Q Mr. Atkinson, you have heard of the disastrous accident at Hawthorn, near Newcastle? A Yes.

15180. Q One may say how that occurred, from what you have heard or read? A Yes, I think it was due to the weakness of the pillars.

15181. Q It is just an illustration of what you were describing before, pillars too small in the first place, and attempting to extract them? A Yes, that is what they were doing. It was on a deep.

15182. Q There were less or eleven men killed there? A I forget the number, it was before my time.

15183. *Mr. Spence* | Q On that point, Mr. Atkinson, do you know what the size of the pillars was at the Hawthorn pit? A I do not remember just now.

15184. Q Do you remember sending that, page 181 of the Appendix to the Royal Commission on the Coal Mines Regulation Bill—

I am also of opinion that the small pillars were too weak to withstand the pressure brought to bear upon them by the weight of the superincumbent strata, and that if the pillars had originally been left of a larger size, the coal so called 4 feet pillars, common in the system usually adopted in working the Newcastle coal seam in the Newcastle district, as a substitution of the better system had been introduced, thereby almost all of the pillars could be extracted in such order as they are found to require, it might have prevented such disastrous accidents, and you will find a "rush" such as that which has so recently taken place at the Australian Agricultural Company's Delong, and in previous instances at the Australian Agricultural Company's, Newcastle Harbour, Co-operative, Lonsdale, and Newcastle Coal Companies, &c.—J. H. 75451

Do not you see then that the pillars were very, very small? A Yes, I see that; but the cover overhead was also very small.

15185. Q What was the cover overhead? A I have not the figures.

15186. Q How was any idea? A Probably 300 feet.

15187. Q The Hawthorn pit is about 180 feet deep,—there is a cover of nearly 200 feet, you see? A Well, the pillars were not taken out of the shaft bottom.

15188. Q Never mind, that is the cover, is it not?

15189. *Mr. Webb* | No; it is the shaft.

15190. *Mr. Spence* | Q Now, do you suggest that in that case, where the pillars were only 4 yards square—

15191. *Mr. Webb* | I object to that. Mr. Spence said, under his breath, "spikes." Mr. Atkinson could not hear that, I see.

15192. *Mr. Spence* | Q Will you suggest that, where the pillars were only 4 yards, that is my criticism, to guide the Commission as to the danger of such thoughts of 35 yards, do you accurately offer that as a solution to guide the Commission as to the danger of such thoughts of 35 yards? A Well, I say nothing, that there has been a tendency in this State to make pillars too small, and it has resulted in the loss of a great deal of coal by crushing, of which that is simply one illustration.

15193. Q It is a very weak illustration is it not? A On the contrary, I think it is a very strong one.

15194. Q I suppose you will agree with that, from page 181 of Hagdon—

There does not, however, appear to be any common system regarding the dimensions of pillars, no easily accessible rule and there can be little ground for the prediction of such safety depending on the individual opinion of the manager. Mr. Atkinson, in his report of the New South Wales Government, quotes numerous instances of varying from 2 feet 6 inches to 8 feet 6 inches, and in a depth varying from 750 feet to 1,600 feet, where quantities of from 35 to 50 per cent. of the coal are left in pillars after the hard and soft have been driven. In the best carbon position never more than from 10 to 25 per cent. of the coal appeared in the "white" workings.

We may take it, generally, Mr. Atkinson, that no rule can be fixed for the size of the pillars? A I think you may.

15195. *Mr. Howe* | That is exactly what you are trying to do.

15196. *Mr. Spence* | That is just exactly what you are trying to do.

15197. *Mr. Spence* | There is a little more of Mr. Atkinson's report here, which I have not put read.

15198. *Witness* | Let me have the rest of the article.

15199. *Mr. Atkinson* | You say they should be 10 yards square. You are trying to fix it.

15200. *Mr. Spence* | Q Did you not say that it should be fixed, Mr. Atkinson? A To what do you refer?

15201. Q I am asking you the strength of the pillars be properly fixed?

12009 Mr. Howe? Q As a general proposition? A As a general proposition, yes.
12010 Q I do not know that that is in a general rule to cover all cases. Is it possible to my, having any
single question, having any quality of that unknown, having all the conditions of the case unknown,
that you can legislate only for any maximum size of pillars? A Certainly not. I think it would be a
very wrong way to take your House. You must have regard to the particular condition and circumstances
arising in connection with the mine.

12011 Mr. Lyne? Q That is what I am going to put to you, you having admitted that the size of
pillars, as a general principle, can be fixed—I now say you are not pillars 30 yards square angle for every
possible conceivable danger, anywhere you like? A No, I think not.

12012 Q Well, you point to any colliery in this State where you think a pillar 30 yards square would be
dangerous? A Yes, the Metropolitan.

12013 Q Any other? A No, I do not know that there are any others.

12014 Q Then, do I take it that with the exception of the Metropolitan, you consider that pillars 30
yards square would be ample? A I think so if regard is had to the width of the gorse, which are made

12015 Mr. Howe? Q Is that under present conditions? A Yes.

12016 Mr. Howe? Q Existing mine? A Existing mine.

12017 Mr. Lyne? Q As comparatively shallow depths? A Yes.

12018 Mr. Lyne? Q Do you know of any thing that would make pillars 30 yards square dangerous, in
any conditions, in New South Wales mines? A Yes, if you take out too large a proportion in the shaft or
in the

12019 Q But you mean that would be with the waste hanging? A I mean that, if you look out too
great a percentage of coal in the first working, it would put too much weight on the pillars left, which
might be a source of danger.

12020 Q But does not the taking out of the coal let the roof of the waste fall, and thereby relieve the
pressure on the pillars? A Yes, certainly not.

12021 Mr. Lyne? Q Mr. Johnson is not talking about the waste. He is talking about pillars and roofs
and outcroppings? A The weight comes on to the neighbouring pillars when the coal is removed.

12022 Mr. Lyne? Q I admit that, but what I am getting at then is that 30 yards square angle for
A I have already said that 30 yards square is ample with the existing mine under the existing conditions,
providing regard is had to the width of the gorse made, or the percentage of the coal extracted, in the first
working.

12023 Mr. Howe? Q It really depends upon the number that you leave of that size? A Yes,
you might take out 30 yards and leave 30 yards, or on the other hand, you might leave a 30 yard pillar and
only take out 6 yards.

12024 Mr. Lyne? Q In practice, then, there can be no objection to the outcroppings having 30
yards? A I do not need to say.

12025 Q Well, I ask you what objection can there be in practice to making the outcroppings every
30 yards? A Well, I think I have explained sufficiently. I do not know what further explanation is
required.

12026 Q Now, you do not think that the conditions at the Metropolitan Colliery are altogether exceptional?
A Yes, in comparison with the other collieries.

12027 Mr. Lyne? Q Do you adopt the expression "altogether" exceptional? A As far as
has come to your or three times, before denied your statement, Mr. Lyne, to that indirectly, the
putting in of adjectives.

12028 Mr. Johnson? Q Is it not objectionable to lay down any hard-and-fast rule for the working of
any coal mine? A I think it is. You must have regard to the circumstances and conditions, which may
also be in the workings advance.

12029 Q The conditions vary, not only in every mine, but also in different parts of the same mine?
A Quite so, they do.

12030 Q And it is not advisable that the Manager should be limited in any way as to the methods of
working and as long as safety is secured? Q I think that is all that is desirable.

12031 Q Then do not you think, unquestionably, that safety is more likely to result from large pillars?
A Certainly.

12032 Mr. Lyne? Q But, Mr. Johnson, no matter how the conditions may vary, are you not
opinion that 30 yards pillars are ample? A No, I have already said so.

12033 Q Now, Recommendation No. 2 you have approved. Recommendation No. 3, "Monthly
examination by the deputies with the hydrogen flame"—you disapprove of that, because it is not what I
want the hydrogen lamp in unimpaired condition? A Yes.

12034 Q Would you be in favour of the monthly examination by the under-manager instead of the deputy?
A Well, perhaps he was sufficiently experienced, I do not see any objection to it.

12035 Q Well, then, would you put it the way that you would approve of a monthly examination and
report by the Manager or under-manager with the hydrogen flame? A Yes, I do not see any objection
to that.

12036 Mr. Lyne? Q Do you remember that it is a safe lamp to take into a place where an explosive
substance of gas may be out? A Well, it is not a place where you should use the hydrogen lamp if you
can use gas with the ordinary safety lamp there, of course.

12037 Q But you, yourself, if you were you had to find in an explosive atmosphere, would you not have
been hesitating in doing so with the hydrogen flame? A I should not use the hydrogen part of the lamp
for working under those circumstances.

12038 Q As a matter of fact, is it not positively dangerous? A Yes, in the hands of inexperienced
persons, it is.

12039 Q Of any person? A Well, you require to be very careful.

12040 Q Even in the hands of experienced persons, in any place where an explosive atmosphere may be
met with, is it not positively dangerous? A To use the hydrogen?

12041 Q Yes? A It would be—yes.

12042 Mr. Lyne? Q But I told a, Mr. Johnson, that the hydrogen is only used where you are unable
to do so with the ordinary flame of the lamp? A That is so.

12043 Mr. Lyne? Q Recommendation No. 4—the maximum of 300 cubic feet of air to be provided
for every horse, you have also heard the recommendation from the Northern District, which they deem
advised,

Witness—A. A. Johnson, 11 February, 1908.

12021. Q And 300 cubic feet of air per minute for each man and boy?—now, do you know that the Royal Commission on the Coal Mines Regulation Bill recommended 150 cubic feet as a minimum for every man, boy and horse? A Yes, I have heard so.

12022. Q But that was reduced in Parliament? A Yes.

12023. Q Now, all the collaries, so far as your reports have shown, had a considerable margin above the minimum? A Generally speaking, yes.

12024. Q To this, in practice, there would be no hardship imposed on any of the collaries that ever came under your notice by increasing the minimum? A In some cases it does not get up to 200 feet per minute all round.

12025. Q Would it, in all cases, get up to 150 cubic feet per minute? A Well, for instance, in the case where Mr. Wyre reported at Corralton it was under the 150 cubic feet.

12026. Q Well, do not you think that it would be a very exceptional case that would not get up to 200 cubic feet per minute, in the way the collaries are now being managed?

12027. Mr. Bruce Smith. Well, then, why require to increase the minimum, if it is always up to double?

12028. A No, I could not say that it would be a very exceptional case.

12029. Mr. Ziegler. Q Then do I understand that there are collaries, to your knowledge, that are sitting pretty close to the wind, so far as ventilation is concerned? A Oh, there have been one or two cases.

12030. Q And was the air then circulating considered adequate? A Well, steps were taken in several cases.

12031. Q To have it increased? A To have it increased.

12032. Q Does not that clearly show that the minimum was too low, and should be increased? A And was increased.

12033. Q And that it should be increased by the Legislature? A We have the power—the Inspectors have the power—to ask that more air be supplied, and I think that that is sufficient.

12034. Q Is it not much safer to start off with a minimum of at least 300 cubic feet per minute, instead of the Inspectors having to wait for complaints, investigate these, and then order it? A Well, there are cases of mines, in which no less change is given off, where I think it would be quite unnecessary to ask for a minimum of 250 cubic feet, whereas, in another case with a quantity of gas, it may be advisable to have 300 or perhaps a good deal more.

12035. Q But, Mr. Johnson, as you say all the mines have considerably over the minimum, whether they have fire-damp or not, where can the objection be to the Legislature fixing a minimum of 200 instead of 150?

12036. A Well, I have not said exactly as you have put it, Mr. Ziegler, but I think that the existing state of the law is sufficient for dealing with that.

12037. Q Well, that is a matter, then, for the Commission? A Except, of course, as I recommended, that in cases of delicate ventilation it should be brought under the provisions of the Subsidies clause.

12038. Mr. Ziegler. Q Have you any proposal of your Inspectors having decided that more air be supplied when they have found the minimum inadequate? A Yes, I think there are cases of that sort.

12039. Q You have got down on record? A I think so.

12040. Q Have you any record of cases where less than the minimum quantity has been supplied?

12041. A Well, we have the record of that case at Corralton.

12042. Q Where less than the minimum was supplied? A Yes, we have the papers in connection with that.

12043. Q Have you any other reports from the South Coast about collaries where less than the minimum quantity was supplied? A Well, there may be, but I do not remember just at the present.

12044. Q What steps are taken when a report is brought under your notice that less than the minimum quantity has been supplied? A Well, I either ask the Inspector of the district to go himself, again, to see how things are, or I sometimes go myself, in company with the Inspector.

12045. Q And, if you found the report to be sagged by your subsequent inspection, what steps are then taken,—if you find, upon the subsequent inspection you have spoken of, that the quantity circulating is less than the minimum stated by Act of Parliament, what do you do then? A I do not remember such a case.

12046. Q Do I understand that you have had reports sent to your Department stating that less than the minimum quantity was being supplied, and, upon making a subsequent visit, you found it not to be verified? A Yes.

12047. Q Has that always been the case? A I think so. I do not remember a case in which that was not so.

12048. Mr. Bruce Smith. Q You have had a good many complaints from the mines that there was too much air? A In some cases, although not official reports, not sent to the Department, to that effect.

12049. Mr. Ziegler. Q Have you had black-and-white reports submitted to you from the South Coast denouncing statements that less than the minimum quantity was being supplied? A Yes, I think the Cornwall black-and-white report was submitted to the Department.

12050. Q Have you had any from the Bath Colliery? A Well, I do not remember. I do not think so.

12051. Q Do I understand you to answer, in answer to Mr. Bruce Smith, that the mines have sent reports to you stating that there was too much air? A No, I have not received reports to that effect.

12052. Mr. Bruce Smith. Q You have had complaints? A In passing round the mines, they would sometimes say the best way was too close up.

12053. Mr. Ziegler. Q A single individual here and there? A Yes.

12054. Q Well, would, perhaps, have the current bearing on his head then? A Yes.

12055. Q You do not take this as a defect in the ventilation of the mine? A No, I like to see it.

12056. Mr. Ziegler. Q As a matter of good mining practice, do you consider it is a proper principle to govern the circulation by the means in the mine? A No, I think rather the governing principle should have regard to the gas which is given off by the coal, or rather that one of the governing principles—

12057. Q In the case of a gassy mine, if there happens to be no one in the mine, according to the Act there is no liability for ventilation? A No, I suppose not, when there is no one there. Of course, that is not a principle that I wish to go forth as having my approval, the ventilation being suspended when persons are not in the mine. I do not wish to convey that.

13171. Q. That is the point I was coming to. As a matter of fact, have you not had to take steps to insure work that is ventilated when no one was in there? A. Yes.

13172. Q. Can you say whether there is such a provision in the English Act? A. With reference to the constant ventilation?

13173. Q. Governing the ventilation by the persons in the mine? A. No, and there is no measure fixed in the English Act.

13174. Q. The English Act only requires adequate ventilation? A. Yes, that is so.

13175. Q. And, after all, is not that all that is required? A. Yes, that is so.

13176. Q. And is not there a danger that, with a minimum quantity, a curious or reckless Manager may put it down to the minimum? A. Well, there is that danger, but, of course, there is the strong chance under which the Inspector has the power to have the minimum increased.

13177. Q. But do not you think that the term "adequate ventilation" covers all requirements? A. I think it does.

13178. Mr. Birkley. Q. Would not that necessarily entail your Inspectors visiting frequently, in order to ascertain whether there was an adequate quantity circulating or not, if it was left entirely to the Manager in that way? A. I do not think it would necessitate any further visits than it does at present.

13179. Q. Do you think a visit once in three months would be sufficient to test whether there was an adequate quantity going or not? A. I think so, yes.

13180. Q. I suppose you do know that, with furnace ventilation, especially, the quantity might vary very much within that period? A. It does vary to a certain extent, with different atmospheric conditions, if not attended to.

13181. Q. And you still think that once every three months would be sufficient for your Inspectors to test the ventilation, to see whether an adequate quantity was circulating or not? A. I think so, yes.

13182. Mr. Birkley. Q. Then, even with the minimum quantity, you have no better means of ascertaining the ventilation in the mine than the view of the Inspectors every three months, or as often as they can go? A. No, I do not see that they have their ability to ascertain the quantity.

13183. Q. No matter what may be the principle laid down in the Act? A. Quite so.

13184. Q. No matter what may be the principle laid down in the Act, it requires the visit of an Inspector to actually test whether the quantity is being supplied? A. Yes.

13185. Mr. Birkley. Q. I suppose you have got no record the whole of the complaints regarding ventilation which have been brought under your notice during your term? A. Yes, they are in the records of the Department.

13186. Q. Would there be any difficulty in forwarding them to the Commission to see how many there have been during your term? A. I think there would be a good deal of work in picking them out. If you could direct my attention to any particular one, perhaps it would assist.

13187. Q. But I should like to personally know whether they are numerous or not? A. No, they are very few.

13188. Q. Could you give us any approximate idea how many you would have, say for a period of twelve months? A. I do not think we should have an average of six.

13189. Q. One or twelve months? A. From the Southern District.

13190. Q. But I am speaking generally now of all the coal and shale mines under your jurisdiction to which the Act applies? A. In reference to ventilation.

13191. Q. Yes, complaints in regard to ventilation? A. I do not think there would be more than two or three per annum.

13192. Q. Then perhaps you might be able to furnish us with some of those where a reasonable point—say, for the last two years. Could you get them? A. Yes, I will endeavor to do so.

13193. Mr. Agnew. Q. The complaint from Gerrard Colliery resulted in your Inspector's record agreeing with that of the chief inspector—the air was deficient? A. I think the result of his visit was to prove, so far as I remember, that at the time of his visit, if I remember rightly, more than the minimum quantity was then being supplied.

13194. Q. But did not the report state afterwards that his statement was out of order? You remember the evidence of Mr. Wynne? A. Yes.

13195. Q. What I want to know is this: Where the chief inspector's record and the Government Inspector's record agreed, what steps were taken to have that ventilation made adequate? A. Do you refer to the Cornwall case?

13196. Q. To the Cornwall case, yes? A. Well, I think the result of the sweeping of the mine at that time—which was done, if I remember rightly, by the Colliery machine—showed that the air was then above the minimum, but I might explain that, just at that time, the Company were working a new fan, and were endeavoring to get that fan into operation as early as possible, which I believe was done within a month of this complaint, since which time the ventilation has been much improved.

13197. Q. And that is the reason why no further steps were taken on that report? A. Yes.

13198. Q. This aspect of the question, as to having any measure in an Act of Parliament, was thoroughly gone into by the Commission on the Coal Mines Regulation Bill in 1895? A. I think it was.

13199. Q. I was just finally on this. Do you see any objection to having the minimum increased from 250 to 300 cubic feet for every man, boy, and horse? A. I do. I think that is some mines it is unnecessary, and that the present law is sufficient.

13200. Q. And that is the only objection you have? A. The only one that strikes me for the moment.

13201. Q. Recommendations No. 3 you have approved, and you say it is in force now. Recommendations No. 10—double doors—I think you have approved now. Recommendations No. 21—I think you consider the monthly record of this is sufficient? A. Yes, I think so.

13202. Q. Of course, you will admit that there are might be good one day in the week and deficient the next day owing to atmospheric conditions? A. There might be a slight difference.

13203. Q. Might there not be a considerable difference? A. Not if the ventilating arrangements were properly attended to.

13204. Q. But does not it depend upon the ventilating arrangements being properly attended to? A. Certainly.

[Witness—A. A. Williams, 11 February, 1902.]

15101 Q Now is not there a greater check on the conflicting circumstances being properly attended to if the measurements are taken every week instead of every month; is there not three or four times the check? A Well, it is a check on the quantity of air circulating at the particular time.

15102 Q Is not any record only an evidence of the particular air flowing at the particular time? A Yes.

15103 Q Is it not better to have such a record every month than every week—is not that self-evident?

15104 A—Bruce Smith: Then why ask it?

15105 Q Well, I do not think that the benefits would be commensurate with the additional labor imposed.

15106 A—Williams: Or carrying that out in the logical conclusion, it would be better taken every hour? A Yes.

15107 A—Lysaght: But I am suggesting something that is reasonable.

15108 Q Remembrance No 10. Now, you have only recommended that thirty lamps should be kept in excess while the others are being used. Is not that so, Mr. Williams? A No, I think it is a definite proportion of the men underground.

15109 Q But I am taking it now, as it would apply to the men underground (in Kentucky). There were, I think, about 300 men underground on the day of the disaster, and the proportion of lamps in excess would have been thirty? A Yes.

15110 Q Do not you see that thirty would have been altogether inadequate? A No, I think it would have been quite adequate.

15111 Q For reasons? A Yes.

15112 A—Wells: There were not 300 men underground, only 200. You have made a mistake about that, Mr. Lysaght.

15113 A—Lysaght: Q You said something about the difficulty of obtaining safety-lamps—I suppose it is only a matter of carrying them from England? A Yes.

15114 Q So that they can be got within a couple of months? A Or more, perhaps.

15115 Q An adequate supply of lamps for the whole of the State could be got within, say, two or three months? A No. It would be within a few months.

15116 A—Williams: I can only say, from my own experience, that I can never get supplies under about six months, and I suppose I am in the best position to speak with authority on it.

15117 A—Williams: Q Do I understand you clearly to say that you thought thirty lamps would have been sufficient to save the men in Kentucky Mine after that disaster took place? A In my previous evidence with reference to this question, I mentioned that in a colliery where safety-lamps are in use, which is the case now under discussion, it is probable that a part at least of the ordinary lamps would be available, in addition to those thirty.

15118 Q I suppose you would admit that it is possible that they might be all in use? A Well, I think it is a very remote contingency that that the men belonging to all three shifts would be in the mine at the same time.

15119 Q Taking Kentucky Mine on the day of the disaster, how many were there out on the front shift, how many were there working? A Just covered at the time when they began about to take leave of the work? A In substance, occurred at the time when both the day shifts were nearly all in, but, in addition to them, there are a certain number of workers in the night who would be at home, and were at home.

15120 Q But it is not possible that those who are working on the night shift, if the night shift comes in early enough, may have their lamps in use at the same time as the day shifts? A Well, I am supposing that there are lamps available for each workmen in whatever shift he works.

15121 Q Narrowing it down, do you think that thirty lamps would have been sufficient to save the rescue parties at Mount Kenilbe Mine after the disaster? A I would not hold myself to that.

15122 Q I suppose you knew that there were a very large number of men there alive who were unable to get out?

15123 A—Wells: But it is far to say that he would have had a very much larger proportion in a mine where no safety-lamps were in use, probably fifty.

15124 Q Do you think thirty would have been sufficient for such a purpose? A I would not be prepared to offer an opinion on that, Mr. Williams.

15125 Q After all the evidence you have got? A I think sixty would be sufficient.

15126 Q Mr. Bruce Smith: He has proposed already that in a mine where safety-lamps are not in use, there should be one fifth of those in the mine—that would be one at Kenilbe.

15127 A—Wells: You are working on the assumption that, at a mine where safety-lamps are used, a number of them would be always out of use.

15128 A—Bruce Smith: No. I do not think you quite understand what Mr. Williams said. He proposed that, in mines in which safety-lamps were not used at all, except for the deputies, one fifth of the total number of men should be the proportion of lamps to be provided; so that there would have been thirty at Kenilbe on the day of the disaster. He was not counting at all upon men being out. If safety-lamps had been in use at Kenilbe, he would have had thirty extra.

15129 A—Wells: Q Well, I suppose you would think it necessary to have the same number of lamps at a colliery where they were using safety-lamps as where they were not using safety-lamps—that is, it would be necessary to have the same number for the use of rescue parties? A Yes.

15130 Q Then you are basing your estimate on the assumption that a number of the lamps is a mine where they were all using safety-lamps would be idle? A Yes.

15131 Q Then, if it is possible that they would be all in use, the number that you have suggested here as adequate would be inadequate? A Yes, I suppose so.

15132 Q Then, is it not better to be on the safe side with appliances for rescue work than otherwise? A Yes, I think it is wise to have a sufficient number, but I also think that the possible contingency which you have mentioned is so extremely remote—and it is impossible to provide for every contingency—that the provision which I have suggested would be ample.

15133 Q Have you any view of what the additional work would be of keeping, perhaps, sixty lamps instead of thirty at the collieries, where they were using safety-lamps, as you proposed? A I suppose the lamps would cost about 12s each.

15134 Q And I suppose they would not deteriorate very much in value for years if they were not used? A They would gradually deteriorate, and, naturally, in order to prevent them from getting rusty and out of order, so as to be ready for use.

15135.

10136 Mr. Bruce Smith: They become obsolete.

10137 Mr. Atkinson: Not necessarily.

10138 Mr. Bruce Smith: You have read a paragraph condemning these books already.

10139 Mr. Atkinson: Q But where were they first brought into use? A Long before either of us were born.

10140 Q And you will think, although the expense would be very small, comparatively speaking, that it is unnecessary to have this quantity of lamps? A I think that the provision which I have suggested is sufficient.

10141 Mr. Robertson: Q From your experience in gusey mines have you not found that there is an ample number of lamps always at any village? A There has always been sufficient in any village with which I have been associated.

10142 Q As witnesses, they do not work with the exact number of lamps corresponding with the number of men employed? A I have never known of an employer in the Old Country, where they were using safety-lamps in a colliery, where there were not a sufficient number for some purpose.

10143 Mr. Atkinson: Q That may be so, but there is no obligation on them to keep them there? A No, there is not.

10144 Mr. Atkinson: Q Then, Mr. Atkinson, the recommendation of yours would not at all affect what is being done at mines in New South Wales where gas has been discovered—you say that they do keep the lamps supply? A Yes.

10145 Q Then, in your opinion, the recommendation of yours will not at all affect what is being done at mines in New South Wales where safety-lamps are in use? A No, I do not think it will.

10146 Q So it is only in the case where the bare light is used that your recommendation will affect the proprietors? A Yes.

10147 Q Well now, can you see any objection to making it a 25th, instead of a tenth, for the surplus supply, assuming as you say all the collieries have a considerable surplus in hand? A I think that that number, together with the lamps which, under ordinary circumstances, would be available, is ample for the purposes required.

10148 Q Then, on Recommendation 12, you are assuming the existence of the management? A Yes.

10149 Q On Recommendation 14 you admit that the Manager does delegate too much to the under-managers? A In some cases.

10150 Q As a Manager yourself, you were able to go two or three times a week underground, I think? A Usually, yes.

10151 Q Do you know of any objection to Managers being compelled to go underground at least once or twice a week? A So far as a reasonably practicable, I think they should.

10152 Mr. Atkinson: Q Mr. Atkinson, as your evidence you say that the Managers should visit the working places two or three times a week? A I think the reporter did not understand my evidence precisely in that respect.

10153 Q That is what I want to get already explained? A What I meant was that I thought the Managers should go underground, and visit part of the workings and return two or three times a week.

10154 Q As a matter of fact, it is absolutely impossible, not only, in a large mine, for a Manager to visit the workings three or four times a week? A It is impossible—the whole of the workings.

10155 Mr. Bruce Smith: You mean that it is impossible for him to visit the whole.

10156 Q Do you mean, in your two or three visits, that he should manage to go round the whole of the working places every week? A No, I do not suggest that, because in any part of the mine there might be places that might be left for a time.

10157 Mr. Atkinson: Q Do you think it is wise to try to restrict the movements of the Manager, considering the varied character of his duties? A Well, I think it is desirable, whether by legislation or not, that the Manager should go underground, under ordinary circumstances, and visit part of the workings two or three times a week.

10158 Q But you say, legislation, increasing the difficulty of the Manager's being tied down to visiting a number of miles per week, has provided for either a Manager or under-manager being in daily attendance? A Yes, I recognize that.

10159 Q Therefore legislation has contravened the responsibility, or the obligations that may be imposed on a Manager being tied in any way to his movements? A Well, I imagine the fact of the appointment of the under-manager. At the same time I think that, in some cases, too much is delegated to him, and Managers, in some cases, spend some time on the surface that is absolutely necessary.

10160 Q In some cases? A Yes, in some cases. I speak with reservation.

10161 Q Do you not think that the average Manager is fully armed with his responsibilities, and carries out his duties, according to his discretion, in the amount of his ability? A Generally speaking, I think so, but I do not see any objection to requiring them to visit underground two or three times a week, so far as is reasonably practicable.

10162 Q But you can see that, the larger the mine, the more administrative duties he has to perform, and, nowadays, the Manager is more frequently called away on official or legal or commercial work also, is he not? A Yes, I imagine that that may operate to a certain extent, but I do not know of any mine in New South Wales where a Manager might not reasonably get down into the workings, under ordinary circumstances, two or three times a week.

10163 Q But do not you see the danger of putting anything down as an Act of Parliament tying the Manager down in the slightest to his movements? A I do not see any danger, so far as looking after the safety of the men is concerned.

10164 Q But did you, as Manager of large collieries, find it possible, on every occasion, to go underground two or three times a week? A Well, the exceptions to that would be quite unusual; for instance, if I was taking a holiday, or anything of that sort.

10165 Q It is within your knowledge, I suppose, that Managers in the coalfield districts, have been, particularly last year, called away on other duties—commercial duties—and had to be away, and stay away, from the mine for days, practically weeks? A Yes, Well, that would be provided for in the legislation, if such was brought about. I only say that he should do so when reasonably practicable.

10166 Mr. Atkinson: Well, as we need the responsibilities that we place upon the Manager should be a sufficient check—a good enough check in my view.

Witness—A. A. Johnson, 11 February, 1939

15820 Witness: Generally speaking, they are; but I think there are cases where I think they are not. 15871 Mr. Lysenko: Q. Summed up, Mr. Johnson, you think it wise, after the Manager in charge of clerical work and outside work, then for him to delegate the personal management of the delivery? A. Well, I do not think that it is desirable for me to make any such distinction. I do not think I can add anything to what I have already said.

15872 Q. Would this be a way out of the difficulty suggested by Mr. Robertson—that it might be provided that if Managers desired to absent themselves for more than a fortnight, they should get special permission from the Chief Inspector? A. Well, I do not think that is a necessary provision.

15873 Q. You make no further suggestion on that?

15874 Mr. Bruce Smith: Q. Do I understand you to say that those two or three visits a week should be in the aggregate a complete visit to the whole of the mine? A. No, I do not suggest that, because it is not possible.

15875 Q. You do not say how much he should see of the mine? A. No, I do not say that.

15876 Mr. Roberts: Q. You mean that he ought to see as much as possible as those two or three visits? A. As much as is reasonably practicable.

15877 Mr. Roberts: Q. Should it be a matter of physical capacity, or should it be a matter of discretion as to what part of the mine he considers it is necessary for him to see, or is that automatically that a Manager might go down the mine every day for a week, and visit one particular point? A. Yes, I think it should be left to his own discretion.

15878 Mr. Roberts: Q. Of course, you do not mean by that that he may, in order to comply with the provisions of the Act, simply get to the bottom of the shaft and come up again? A. No, certainly not.

15879 Mr. Bruce Smith: Q. You would not define how long he should stay in.

15880 Mr. Roberts: Q. No.

15881 Mr. Lysenko: Q. Recommendation No. 16—size of machines—Do you know this proposal, that they should be whitewashed? A. Well, it is a very good suggestion.

15882 Q. You approve of that? A. Well, there may be cases where whitewash would be more than that to make the whitewashing of any real effect it might require, to be done every two or three days, or every week, perhaps, but, generally speaking, it is a good thing to distinguish the position of the machines.

15883 Q. Would you approve of the recommendation that they be whitewashed and kept covered from time to time—it would not be much expense, would it? A. I do not think that is a matter which the Legislature should be asked to deal with.

15884 Q. On a general basis? A. I do not think that.

15885 Mr. Roberts: Q. Do you know that there are big loads of machines in some collieries? A. Yes.

15886 Mr. Roberts: Q. I suppose you have seen machines whitewashed? A. Yes.

15887 Q. It is not actually new? A. No.

15888 Mr. Lysenko: Q. As a matter of fact, in places where there would be a lot of traffic the machines would want to be whitewashed once a week or once a month, but other places would require to be whitewashed only once in twelve months? A. Possibly.

15889 Q. I think you approve of the recommendation that employees should be instructed in the ways out of the mine? A. Yes.

15890 Q. You did not say anything about the direction boards?

15891 Mr. Roberts: Q. Yes, he did.

15892 Mr. Roberts: Q. Mr. Johnson, you are not the difficulty in a very large mine of giving access to this recommendation, where there are so many entries, so many miles to travel, it would become unworkable to then every man in every district the outlets in that district and every other district. Do not you think it would comply with your idea if the employees were shown an alternative route, because there are many alternative routes? A. I only suggest that they be shown the road every three months. I do not intend to convey by that that they should travel every possible route every three months, but only the route from their own district.

15893 Q. Yes, but there may be half a dozen routes—would it mean four miles if they were shown one alternative route?

15894 Mr. Roberts: Q. Or as many alternative routes as the Inspector might from time to time prescribe—how would that do?

15895 Mr. Roberts: Q. It is very easy, if there are half a dozen roads from a district, do you require them to be shown every road? A. I think it would be better to show them one road specially, if that road was well-defined, so that in the event of their getting into it they would not get lost in the old workings—the pillars.

15896 Q. Yes, but the majority of these entries, always cannot be described as well defined. Do you think that something more would be required to assist the men in the way out? A. Well, I think it is probable that a number of men who travel once would be able to find their way out, although each individual man going alone might not be able to do so.

15897 Q. Do not you think that in the multitude of circumstances, without having been shown the way out at all they would feel their way out? A. Well, generally speaking, that may be so, but I think that they should be afforded some opportunity of learning alternative routes.

15898 Q. What I want to know is, do you think it necessary to show them every alternative route out, or would one be sufficient? A. Well, taking the case of the Kendal Mine, I think it would be desirable that they should know the way out by the daylight heading, and also by the heading over to the Manager's house, and the suggestion is to use alternative routes would hardly cover those two.

15899 Q. Then the men working here (No. 1 Mine, Eight weeks) would have to be shown this way (the daylight heading) and also this way (route near Long wall) have regard to John Manager's day job? A. Yes, but I do not suggest that that should be done each quarter. They should be shown the route out from their own district each quarter.

15900 Q. Yes, but from this district there are those two ways. One might be blocked. Should the men be shown the way out by both? A. Well, during the course of the next three months, or whatever they get into the other district, they would then have the opportunity of knowing the way out of this other district. I admit that to put it into language is rather difficult, to set all the cases which might arise, but, as a general rule, the miners should be made aware of the ways out.

15400. Mr. Robertson: I remember it is absolutely impracticable.
15401. Mr. Lyngby: Q. How could Recommendation No. 13—black list—you said you did not think that such legislation as was suggested should have a place in the Coal Mines Regulation Act? A. Yes.
15402. Q. Well, is what Act do you think it should have a place? A. Yes.
15403. Mr. Brown: That is a very big question.
15404. A. Yes. I could not say.
15405. Mr. Lyngby: Q. What is the objection at all to having it in the Coal Mines Regulation Act? A. Well, the Coal Mines Regulation Act is framed for the purpose of looking after the safety of the workmen.
15406. Q. Do not you know that there are a large number of provisions in the Coal Mines Act—see sections, the necessity of wages, and other things like that—but have nothing to do with the safety of the men? A. Yes. I am aware of that.
15407. Q. Now, where in the objection to having that legislation at all, in the Coal Mines Regulation Act, as it is in the American law? A. Well, in my opinion, I think it is undesirable and unnecessary.
15408. Q. This is on the whole principle? That is that the legislation is undesirable and unnecessary? A. Yes.
15409. Mr. Bruce Smith: He did not say so. He said it was undesirable to have in the Coal Mines Regulation Act.
15410. Mr. Lyngby: Q. Where is the objection to having it in the Coal Mines Act, any more than in any other Act? A. The question is, first, do you believe that it should be legislated upon at all? A. I should just like to hear the terms of the recommendation.
15411. Mr. Bruce Smith: Mr. Atkinson, do you include in an Act the Rules and Regulations under that Act? There may be power given in an Act to make rules.
15412. Mr. Atkinson: I mean, should the principle, which the recommendation speaks of here, be included in any Act of Parliament?
15413. Mr. Bruce Smith: Do not include in the Act the Rules made under the Act, and having the same force as the Act?
15414. Mr. Atkinson: Just the same as they are under the Coal Mines Regulation Act.
15415. Mr. Lyngby: Q. (After reading Recommendation No. 13.) Now, finally, do you say that those matters should not be legislated upon at all? A. Yes.
15416. Mr. Bruce Smith objected to the question.
15417. Mr. Atkinson: That is the question Mr. Atkinson was putting, and Mr. Lyngby took it up.
15418. Mr. Lyngby: I prefer to have it put in the way that Mr. Lyngby has put it. If he answers that, it will answer me.
15419. A. I have not considered the question in that aspect very much, and I think it is really a matter for the Commission to decide.
15420. Q. Then you have no opinion to offer on the matter at all? A. No.
15421. Mr. Lyngby: Q. Well, supplementary to that, you recognize by receiving anonymous communications, that men are afraid to report? A. Yes.
15422. Q. You know that the directors of the House Committee are that the House Committee shall receive anonymous communications and give them every attention? A. I do.
15423. Q. The same principle was recognized in England? A. Yes.
15424. Q. Now, if this Commission think there should be legislation upon that subject, what objection is there to that legislation being in the Coal Mines Act, which deals with a lot of other things besides the safety of the mine? A. I do not see that the case which you have put before my opinion, Mr. Lyngby.
15425. Q. I want to know why it should not be in the Coal Mines Act, at all? A. Yes.
15426. Mr. Bruce Smith: I will ask your Honor, really, in this matter upon which Mr. Atkinson's opinion can be asked? He is an expert in coal-mining, and this is really a question of legislation.
15427. Mr. Lyngby: A question of that kind had better be asked of a Parliamentary expert or a legal expert.
15428. Mr. Lyngby: With every respect, your Honor, Mr. Bruce Smith asked him.
15429. Q. Well, as this is a matter not affecting in any way the safety of the persons employed in or about mines, I am of opinion that it should not have any place in the Coal Mines Regulation Act, as to whether the question should be dealt with by legislation is a matter for the Commission.
15430. Q. Now, I ask you, having told Mr. Bruce Smith that you did not think it should have a place in the Coal Mines Act, why should it not have a place in the Coal Mines Act?
15431. Mr. Bruce Smith: I understood that Mr. Lyngby was going to quote something to justify him in asking the question, because I asked Mr. Atkinson something. He has done nothing of the kind. I asked Mr. Atkinson: "What do you say about that?" And Mr. Atkinson simply said, so to the propriety of putting it in an Act, that is a matter for the Commission. Why should it be asked up now, and what is the relevancy of putting my personal opinion?
15432. Mr. Atkinson: It does not matter Mr. Lyngby, whether it has been asked before. It is a matter for the Commission to decide whether it is a proper thing to waste that by asking a coal-mining expert a question on legislative policy which had better be asked of a Chief Secretary. If he had been a Chief Secretary for some years, it might be put.
15433. Mr. Lyngby: Very well, your Honor. I suppose your Honor will take it that it is merely fair to ask Mr. Atkinson any questions on these two recommendations yet.
15434. Mr. Atkinson: It has fallen.
15435. Mr. Lyngby: I would prefer, your Honor, to have an opportunity of concluding these.
15436. Mr. Atkinson: Some of them may be simple enough, others may not be.
15437. Mr. Bruce Smith: How many are there that are new?
15438. Mr. Lyngby: Four, except the addition in No. 13 about the rule of the members.
15439. Mr. Bruce Smith: Generally I would ask that the same course be pursued in regard to those that have been passed in regard to the others—that Mr. Lyngby's cross examination of him should come after he has answered his tentative opinion.
15440. Mr. Atkinson: Yes, but it is convenient for Mr. Lyngby to ask him his tentative opinion.

- 12412 Mr. Bruce Smith.] But he had the advantage in the other case of sleeping there word by word, and thinking them out.
- 12413 Mr. Moore.] If Mr. Atkinson requires time to consider them, it is as well that he should have it. But, as to the case of the members, that is a question he has already had time to consider; and now it is suggested that they should be a certain one, and that is a question that could be, reasonably enough, put to him.
- 12414 Mr. Lyngby.] Q. I think you have already said what you thought adequate? A. I should like to know what the proposal is.
- 12415 Q. Six feet high, 6 feet deep, and 5 feet wide, and to be unobstructed? A. Well, I think it would be better if I had a little time to consider that.
- 12416 Q. Regarding the addition to Recommendation No. 13—"Twisting and bending roads, and other places necessary to be properly watered, and all traveling, main, and horse roads to be 5 feet high? A. Yes, I should like that.
- 12417 Q. You approve of that? A. I do not say I approve of it, but I would like it. If the main is only 5 feet high, it might become a question of a great deal of cost to maintain a 5-foot road, although, personally, I should like it.
- 12418 Mr. Bruce Smith.] Q. And it might become a danger to the roof? A. There is the question of not taking down the road.
- 12419 Mr. Moore.] Q. Is it safe to interfere with the roof, or is it better not to interfere with the roof? A. I do not suggest that as a reason for not making it 5 feet high, but the principal question would be one of cost.
- 12420 Q. Supposing you had a roof which was in a safe condition, but might get into a leaking condition, what would you agree to the advisability of leaving holes in it, in order to make these members 5 feet high? A. The breaking of the roof?
- 12421 Q. Yes. Where you have a roof running from 5 ft. to 5 ft. 6 in. up, and you do not find that as an sufficient height—that is a solid roof, immediately over the roadway there or in there will be a likelihood of an injurious effect by making holes in it to give the increased height to the members? A. In some cases I think so. I think it is necessary to define the height of twisting roads.
- 12422 Mr. Moore.] This is a suggestion dealing with the height of the members.
- 12423 Mr. Lyngby.] No. We are on the twisting roads now. The suggestion was that all twisting, main, and horse roads be 5 feet high. Mr. Atkinson said he would like it, but there might be a difficulty in carrying it out.
- 12424 Q. Now, may I take it that, where the main is 5 feet high or over, there would be no difficulty in carrying it out? A. Well, I think that the suggestion that I should have a little time to consider these matters might be carried out.
- 12425 Q. Then there is added to that, "The twisting and bending roads to be properly watered and kept clear of any logs that may have fallen?" A. Well, I mentioned that I am to have time to consider these.
- 12426 Q. Then, as the 13th Recommendation—the instruction of employees on the way out—this addition is proposed? A. And that all engine shafts be properly equipped with wires to clear men in case of accident, and proper means of signaling be also fitted? A. Yes, I believe in that.
- 12427 Q. So that the men from Lohjoga, and then from Newards—what says, "Proper machinery to be kept at the second shaft either to lift all employees to the surface when one here"—are practically the same suggestion? A. Well, you continue to go on with them, and I have already agreed that I should have time to consider them.
- 12428 Mr. Lyngby.] I beg your pardon. I thought it was understood that you could go on and answer some of these.
- 12429 Atkinson.] No; I prefer to have time.

Cross examination by Mr. Wade.

- 12430 Q. You gave, nearly a week ago, a number of suggestions that have been offered for slaying the dust in coal-mines? A. Yes.
- 12431 Q. One suggestion was the use of disapposent oils, was it not? A. Yes.
- 12432 Mr. Bruce Smith.] I do not know that he suggested that.
- 12433 Witness.] No. I mentioned that they had been used.
- 12434 Mr. Wade.] I am coming to his suggestions now. He mentioned, first of all, suggestions put forward by different people. Now I am coming to his own particular view of the matter.
- 12435 Q. Would you suggest the use of disapposent oils as a practical method? A. No, I would not.
- 12436 Q. Now, another suggestion which you quoted was spraying at the screens of the downcast? A. Yes.
- 12437 Q. That would be actually outside the pit? A. Yes.
- 12438 Q. Now, leaving in mind the relative positions of the screens and the tunnel mouth at Mount Kemble, do you see any occasion, even at the present moment, to suggest spraying at the screens? A. No; I do not think it would have the effect there of spraying the dust going into the tunnel mouth, which is the object of such sprays wherever they are used.
- 12439 Q. And there is a considerable distance between the screens and the tunnel mouth at Mount Kemble? A. Yes. I do not exactly know how far.
- 12440 Q. Say 70 feet at least? A. I should think so, yes.
- 12441 Q. And a large portion of that is open air? A. I should think so, yes.
- 12442 Q. There is a cut roof, even on both sides? A. Where you strike at the underground.
- 12443 Q. And the screen has been left away from the tunnel mouth? A. Yes.
- 12444 Q. Another suggestion you have quoted is watering curtains not lighter? A. Yes.
- 12445 Q. Do you think that, by itself, would be a serious impediment against the spread of an explosion? A. If done thoroughly over a certain length, spraying of curtains, it has been found, is possible to prevent the spread of explosion.
- 12446 Q. Has not experience shown that, in some instances, these lengths, being watered and damped, have not stopped the spread of explosion? A. No, I do not know of any particular case where it has been regularly attended to.

15475 Q Did not Mr. Hall say so, in the Perry-gate case? A Yes. Mr. Hall mentioned what happened between the two districts in the Pen-y-graig Colliery.

15476 Q And on that case had not that explosion travelled over a wet vein of tunnel? A I think he says that the debris were separated by a stone drift, and suggests that there was no coal dust in that drift, although I do not know what guarantee he had that there was no coal dust in the stone drift. On the other hand, there are numerous instances where explosions have been known to be stopped by wet lengths.

15477 Q I am not referred to here (page 509 of the evidence). Mr. Hall's opinion is, "I imagine that, at any rate in a coal dust explosion, there will always be a penetrating cloud of dust travelling forward in advance of the fresh flame, sufficient to feed the explosion, for some distance when passing over ground either damp or free from dust?" A Yes, I have read that.

15478 Q So you have that element in every explosion in which coal dust is concerned—there is a penetrating cloud of coal dust in advance of the actual flame? A Yes.

15479 Q And, if you only water lanced persons, you run the risk that the penetrating cloud of dust may be sufficient to carry the explosion over the damp part? A Yes, if it is not sufficiently long.

15480 Q So that you are really driven back to this, that if you are going to water, the result at all, the partial application of water is not sufficient—it should be thorough and continuous? A Well, it would be better, although there are several cases on record where the wet lengths have stopped explosions, and you have scarcely got out of the district.

15481 Q Mr. Robertson? Q Did the wet lengths at Kemple stop the explosion? A Well, the explosion was confined to the No. 1 Right district.

15482 Q But it came right out and wrecked the buildings at the tunnel mouth? A Well, I could not describe the entrance to the tunnel, where there was some drops of water, so a wet length.

15483 Q Is it not a fact that the tunnel, from the entrance right to the junction of No. 1, was always in a damp condition, and that there has someone along the No. 1 main heading lamp, which are wet, and always were? A Yes, there are places where, particularly, there is damp on the floor, but I do not know of any which could be described as sufficiently wet to maintain a wet length on the No. 1 Right.

15484 Q But it is not that same tunnel, from the tunnel mouth to the junction of the No. 1, damp, and has not it always been in a damp condition? A Yes, there was damp from the roof in a few places.

15485 Q But is not it all along? A I think not sufficient to prevent the deposition of some dust on the ribs, for instance.

15486 Q Mr. Robertson? Well, I beg to differ from you, Mr. Atkinson. As far as my observation has gone, that was always a damp strake, and, moreover, it is not driven in the coal, but in the stone, and that was not sufficient to arrest the explosion.

15487 Q Mr. Brown Smith? Well, Mr. Robertson, is not there a very great distance between the penetration of a fresh explosion, in a wet place, and the passing of an explosion over a wet part of the mine?

15488 Q Mr. Robertson? But here is an explosion carried right through a long damp section, 300 yards, I suppose, or length.

15489 Q Mr. Brown Smith? There is no evidence that any fresh explosion took place in that length.

15490 Q Mr. Robertson? I did not say it was a fresh explosion, but I do say, here was an explosion that was carried right through this long damp section of 300 yards, therefore damp sections, unless they extend 300 yards—I am assuming, of course, that that is the length of the section—will, in certain cases, fail to arrest the explosion.

15491 Q Mr. White? Q Now, let us take the first few hundred yards from the tunnel mouth to Mount Kemple in the junction of No. 1 Right, as a matter of fact the coal there is stone? A Yes.

15492 Q And the deposit of coal dust in the roof is very slight indeed? A Yes.

15493 Q And are there not patches from time to time between the tunnel mouth and the 4th Right, the floor of which, at all events, was damp at that time? A Well, I think that is so, more particularly on the travelling road, in two or three places.

15494 Q But is not there a swallow somewhere between the 4th Right and the 2nd Right, a hollow where water collects? A I do not think there is at that point.

15495 Q Where else, do you know? A There is a little water on the lower ribs of the 4th Right.

15496 Q Do you know the 2nd Right, that is on the edge side of the 4th Right? A Yes.

15497 Q Is not there a swamp, or hollow, there for the collection of water, and so not the water drains from that hollow, eventually, out of the mine by pipe? A I think the hollow that you refer to is beyond the 4th Right.

15498 Q But you do not know of any hollow anywhere near the 2nd Right? Q I do not remember that.

15499 Q Now, with regard to the question of watering various sections, Mr. Hall is a man of rare experience? A Yes, he is.

15500 Q And a man whose judgment you rely upon, whose judgment you would not question, at all events? A Oh yes, I would not question him. I would not altogether agree with him.

15501 Q It is a fairly responsible step to take, at the present day, is it not, to decline to recommend watering at all along the road? Q Yes, it is.

15502 Q He has taken that step, has he not? A Well, I think it practically amounts to that.

15503 Q Does it go, page 1395, in the same column from his report, "In the uppermost district," that is referring to the district over which he has control? A The Liverpool district.

15504 Q "In the lowermost district, attempts to deal approximately with the dust throughout the mine by means of water have been abandoned." A Yes.

15505 Q And that his suggestion is that precautions should be taken to water on the vicinity of shales? A Yes.

15506 Q You can say then, that there is some risk that a damp area may not be sufficient to arrest the progress of an explosion? A Yes, I think so.

15507 Q It is a question which has not been deliberately decided as to what length is absolutely necessary, so that you are driven, logically, to this position, that the watering must be throughout the length and breadth of the mine—that is, logically, we will come to the question of practicability afterwards? A I do not see that exactly. It is a matter of some difference of opinion yet, I admit, but I also say, and can show proof, that wet lengths have, in some cases, arrested explosions.

Witness—A. J. Adams, 12 February, 1893

- 18180 Mr. [Reveries.] Q Do you know of cases where dusty places have also started the explosion?
or, at all events, where the explosion has stopped at dusty places? A Yes, I have also heard of that.
- 18210 Mr. [Wade.] Q Did you find that happen at Cwmrhyll?
18211 Mr. [Reveries.] Q Did not that happen at Kenville?
18212 Mr. [Reveries.] Q Does not that follow, however they stopped, that they were arrested.
18213 Mr. [Reveries.] Q Did those stoppage, and, logically, an explosion is as good as the other.
18214 Mr. [Wade.] Q Is not that what happened at Cwmrhyll, that the explosion was stopped by dusty
length? A I forget now, but sometimes the stoppage is attributed to the dusty condition of the dust
where it has been stopped.
- 18215 Q And also in the case of an, even on the main intake, arresting the explosion? A I do not
remember a case of that sort.
- 18216 Q But you can imagine of that? A On the main intake? It would be very improbable that
there would be a whistling of air in an intake.
- 18217 Q Well, leave that out—say on a road where there is dust, and the dusty condition might be
expected to feed the explosion, the explosion has not gone on, but has stopped, apparently from want of
air, and not from want of dust? A I think it is entirely to happen.
- 18218 Q But the difficulty you have to contend with, the dust, is this—that the passing of dust
dust can be reflected in some over the damp area? A Yes.
- 18219 Q And the length of passing dust you cannot leave it? A Not very well.
- 18220 Q Now, would you suggest the watering of the haulage roads, speaking generally? A Where
dry and dusty? Of course, that is a term which has never been properly defined yet, and some care
should be taken to define it.
- 18221 Q Whenever it means, you have said, I think, that you would not apply that term to Kenville—a
“dry and dusty” mine? A I have said that, on certain portions of the haulage roads, you could call it
dry and dusty, but that you could not call it altogether a dry and dusty mine.
- 18222 Q You have told us, I think, that watering the floor may lead to a crop sometimes? A Yes; it
cures the floor to lift.
- 18223 Q And watering the roof may lead to deterioration of the strata? A Yes.
- 18224 Q Do you think it would have any effect on the timber, supposing there is timber in the road
that you are watering? A Well, timber generally has longer to a dry state than a wet one, and adding
water to it may have the effect, to some extent, of rotting the timber.
- 18225 Q That is, where the air of the mine is naturally damp, the timber perishes sooner than it does in
a mine where it is dry? A Yes.
- 18226 Q And I suppose that watering it continuously would have the same effect, even in a dry mine?
A To some extent it might.
- 18227 Q Could you say how many gallons it would take per mile to water the floor, say? A Well, in
order to water to any good effect it should be thoroughly watered.
- 18228 Q Yes. A Well, I have seen it estimated variously. Of course, it depends to a great extent on
the quantity of air which is passing.
- 18229 Q Take a mine of normal temperature first, and leave the hot ones till afterwards? A It depends
to a great extent on the quantity of air which is passing, because it will hit up the moisture, and, of
course, as you suggest, it would depend on the temperature.
- 18230 Q Take a mine with a normal temperature, and leave the hot ones till afterwards? A I have
seen a calculation that a quarter of a gallon to a square yard was sufficient to water the roadway.
- 18231 Q Now, take the case of a mine with a high temperature, would the watering require to be done
more frequently in that case? A Yes.
- 18232 Q And what would be the effect on the men themselves of continual watering in a mine of high
temperature? A Well, I think it generally has a cooling effect.
- 18233 Q Would not it tend to make the air very moist? A If it required so absolutely large quantity
of water, although, where they have watered in dry and dusty and hot mines, I think the general effect
has been to reduce the temperature of the air without adding to the discomfort of the workmen.
- 18234 Q But, although you would have the reduced temperature, you would have much more moisture
in the air, would you not? A Yes, I suppose there would be.
- 18235 Q Now, with regard to the removal of the dust body—do you think that is practicable—that is,
removing the dust that has on the floor and body? A No, I do not think that is practicable.
- 18236 Q And that has been recommended, has it not, by various authorities? A Well, it is very often
recommended, even after the outbreak, to prevent the accumulation of dust on the floor.
- 18237 Q Well, of course, take the case, where a lump of coal may fall off the ship, it is only tedious to
clean that up? A Yes, that is so.
- 18238 Q But I am speaking, of course, of the dust that is deposited on the roadway, say, from the
travelling of the ships, or anything like that? A Yes, generally speaking, the idea of bodily removing
the dust, with a view to secure perfect safety, cannot be relied on, but there are cases where it is
desirable to occasionally remove deposits of dust, especially if they do not water.
- 18239 Q If they do not water occasionally, it might be removed? A Although I cannot be relied
upon as an officially safe method, or practicable.
- 18240 Q Now, with regard to all these explosions in England, which have given rise to the elaboration of
the coal dust theory, has not nearly every one of those been issued to a ship in the mine and? A Most
of them, several at times have.
- 18241 Q Have not most of them? A Well, I could not say that most of them have.
- 18242 Q Is not Tylor one of them? A Yes.
- 18243 Q Was not Seabury? A Yes.
- 18244 Q Unsworth? A Yes.
- 18245 Q There are the three leading cases? A Yes, well, there were several others in South Wales.
- 18246 Mr. [Reveries.] Q Adams? A Adams was very reckless blasting on the haulage road.
- 18247 Mr. [Wade.] Q Was not Cwmrhyll the explosion in Somerset that was said to be pure coal-dust?
A Yes.

15497b Q That was from a shot in the baggage road? A Yes.

15499 Q And what about Timbrey, was not that the same? A Timbrey was a shot as well.

15500 Q In all those cases, was it not a fact that the velocity of the shot had not been tested? A Yes.

15501 Q And there was that? A Yes.

15502 Q So, do not you think that when you have a place that is dry and dusty in the vicinity of a shot, if you thoroughly clear the dust is the vicinity for practical purposes, you secure safety? A If that is the case, I think you do. Of course there is just the remaining possibility of anyone tampering with the safe-lamp, which would not be covered by that.

15503 Q But I could take a case even where you do not use the safe-lamp,—take the case of a man placing a shot in a main road that is dusty, supposing the dust is either removed from the neighborhood of the shot or it is properly cleaned, does not that practically secure safety? A Yes, if that is properly attended to.

15504 Q And you know that there is a certain limit to the flame that sprouts out from a shot? A Well, putting it in another way, 20 yards of watering is supposed to remove any possible danger from the flame.

15505 Q That is all you want to guard against by watering—is to have no dry dust in contact with the possible limit of the flame of the shot? A In order to safeguard any of effects from shooting.

15506 Mr. Allanson] Q In the case of those explosions you have referred to, did you say whether in any one instance, safety explosives were used?—private explosives? A No, they were all gunpowder, blasting powder.

15508 Q Or dynamite? A Oh, in the case of Allanson, I believe it was dynamite.

15507 Mr. Wade] Q And the witness of the explosion, again, may further tend to the safety of dust-firing? A Yes.

15508 Q And the condition of the watering? A Yes.

15509 Q And by these "permitted explosions" you either limit the length of flame or else you do away with the flame altogether? A Yes, you reduce the danger to a minimum.

15510 Q Now, is not this a fact, too, with regard to all these explosions I have quoted—Fairbro, Salsman, Fawcett, and so on—that the charge was at a high velocity? A I think it was all as the mine and had some special.

15511 Q And, under that system, the train travel up in, sometimes, 45 and 12 miles an hour? A Yes, they do.

15512 Q And they would be travelling out against the air? A Yes.

15513 Q So that you have the pace of the intake air meeting the pace of the outgoing train of rail? A Yes, that is so.

15514 Q And that fact tended to set up almost a cloud of dust, did it not, from the travelling train of rail? A Yes, it tended to raise the deposition of more coal dust on the roadways.

15515 Q And that more dust would probably settle on the roof and sides? A The roof and sides.

15516 Q Can you tell me this, whether from your knowledge or from your knowledge, not most of the coal stops in the coal country again, that is, not dark-light? A Well, they are not dark-light, but in South Wales they were a good deal more open than in other parts of the country.

15517 Q In South Wales they are absolutely open? A Yes, only two large laws across to keep the dust in.

15518 Q So that, in those cases apart from the deposition of the dust on the roof and sides, all the dust that could be shaken out from the tub on the roadway? A That applies particularly to the South Wales description of law.

15519 Q So that it is in the baggage road that you get the greatest deposit of fine dust? A Yes.

15520 Q Under those conditions, men and tail rope, travelling at a fair velocity? A Yes.

15521 Q And, to make the dust explosion, that is, to help it in a dust explosion, must not you have certain conditions existing, or combining, in the dust itself? A Well, you require to have a cloud of dust.

15522 Q There would be a cloud first? A And the dust would be fine.

15523 Q And the dust has to be of a certain fineness? A It has to be fine, yes.

15524 Q I mean, any fine dust will not necessarily be explosive? A You are referring to coal-dust.

15525 Q Yes, there must be a certain purity about it, must there not? A Well, I am not very sure about that, whether they have found that way or dust was absolutely impure in explosion.

15526 Mr. Allanson] Would not the percentage of reliable matters be a factor? A Yes, it would, certainly.

15527 Q That is to say, given two loads of the same degree of fineness, the one that contained the greatest percentage of volatile matter? A Would be the more explosive.

15528 Mr. Wade] Q And the fineness of explosion of coal dust depends, in some extent on the length of time it has been lying exposed to the air? A I think it is generally admitted that air passing over dust makes a more sensitive to explosion.

15529 Q Now, as much with regard to the baggage road, the main baggage road. Take the horse road that is used for feeding the flats to make the train up, there is practically no dust on the roof of these horse roads, is there? A Well, there may be a very little dust, after the passage of a large quantity over a certain roadway, but it would be much less than you would be likely to find in a baggage road.

15530 Q And one reason is that there is less coal passing over that horse road in the course of a day? A Yes.

15531 Q And another reason is that the pace the horse travels during the day is much slower than the pace the train travels? A Truly, especially if it is men and tail rope.

15532 Q I am speaking of men and tail rope, in drawing the waggon. Then, again, the dust you get in the actual working places has not got the age that the dust in the baggage road has, has it?

A No.

15533 Q And, therefore, I suppose, it is less likely to be explosive? A Generally speaking, yes.

15534 Q And, in addition to that, where you are filling all the wind gear, slowly fill, or stop-filling, as they call it, you get less dust and on the working places? A Yes, less dust if they were filling with the fans.

15535 Q Yes. A Well, I do not know. There might be a little difference, but I do not think it would affect it much.

Witness—A. A. Adams, 12 February, 1905.

15288. Q But you know that, when filling with the fork, there is always a serious amount of small coal left behind? A Yes.
 15289. Q And when you are filling with the shovel it will get in the shop? A Yes.
 15290. Q Now, just before Kamble's last accident, they have the engines repaired then, have they not? A Yes.
 15291. Q Do you know how long they were laid that? A I could not say exactly; but I think it was in approximately before I came.
 15292. Q Do you know what goes these days travel up? A Two or three an hour, I think.
 15293. Q There would be the very outside? A Yes.
 15294. Q And are not these taken dust tight? A The ones take? A Yes.
 15295. Q There are a number of new take wheels are absolutely dust tight? A Yes, but I could not say the same with regard to the wooden take.

[At 1 p.m. the Commission adjourned until 2 p.m.]

RESUMÉ

(On resuming at 2 p.m. Mr. W. B. Post attended to take shorthand notes of the Evidence and Proceedings.)

ALFRED ABILEY ATKINSON, previously sworn, was further examined as aforesaid —

Cross-examination by Mr. Wade —

15296. Q In these lay-downs there is always a serious amount of negligence mixed with the dust. A Yes, with the floor dust. Where the horses travel they deposit some of the staves composing the floor.
 15297. Q There is also the dung of the horses? A Yes.
 15298. Q Do these impurities tend to make the road less slippery? A They do.
 15299. Q As to the travelling road—there is an end drawn through them at Kewstoke? A No.
 15300. Q And on the horses travel in by these roads? A I think they do in some places.
 15301. Q There is nothing in the condition of the travelling roads in Kewstoke to help an explosion? A No.
 15302. Q Part of the travelling roads are rather dusty.
 15303. Q Whereabouts? A There is some dust between the 4th Right and the 5th Right.
 15304. Q Is not that dust largely mixed up with stone dust? A Yes, certainly mixed in it.
 15305. Q Large pieces of stone are lying on the travelling road and also elsewhere? A Yes.
 15306. Q Now, with regard to the opening of the 5th Right. Do you know how the coal came out from the 4th Right, was it by horses or by means of the rope? A It would be attached to an endless rope just after it came out of the 4th Right.
 15307. Q Do you mean up to the point of where you call the edge of the grid—up to that point would it be brought out by a horse? A Yes.
 15308. Q And from that point just continued to where it actually goes the main No. 1 main level.
 15309. Q It would go the main rope as the No. 1 main level.
 15310. Q There is a pillar line on the eastern side of No. 1 back heading? A Yes.
 15311. Q Now, between the pillar line and No. 1 main rope run, how does the coal travel—was it by horses? A Well, I do not know whether the horse was taken in No. 1 main rope and whether the coal was taken by hand a certain distance.
 15312. Q The endless rope did not operate anywhere possible the opening into the 4th Right of No. 1 main level? A No.
 15313. Q Was there not a gutter near the 4th Right? A I do not remember seeing a gutter, but I remember seeing some water between the travelling road and the grid edge in the 4th Right.
 15314. Q When did you see that? A After the explosion.
 15315. Q You were in the mine within twenty-four hours after the explosion? A Yes.
 15316. Q And you saw where that water came from, did it come down the travelling road or out of the 4th Right? A Out of the 4th Right I should say.
 15317. Q You say you saw some water lying there—in what extent was it? A Sufficient to imagine as it is would not be got wet in the first.
 15318. Q Did it stretch across the road from one rib to the other? A I think you could imagine to get right up to the grid edge with ease.
 15319. Q Over whose length did it extend—measured from the travelling road towards the grid edge—an extent of feet, or yards, or what? A I could not say exactly. I think the water would be in the last 50 yards from the travelling road—and is, as far as I can remember.
 15320. Q Now you saw some debris, or rubbish, heaped against the outside side of some ribs, going to lay the 4th Right? A Yes, I noticed that.
 15321. Q What was it composed of? A Small pieces of coal, I think.
 15322. Q Were they like the shavings that come from hewing the coal? A I should think that they were small pieces of coal which had dropped off the ribs or travel along the road.
 15323. Q In No. 1 road, do you mean? A In No. 1 road.
 15324. Q Could these pieces have come from inside the 4th Right? A I do not think so.
 15325. Q Why not? Why would they not have been taken there? A Well, I think that anything coming out of the 4th Right would strike against the ribs of coal in No. 1 main level.
 15326. Q Do you think the floor would knock small pieces of coal to powder against the ribs? A Well, I would not say that it would knock the coal to powder, but it would reduce the size of any articles thrown out to that way.
 15327. Q But these pieces of coal which you speak of—were they not really the chips of coal which are made in hewing the coal? A Yes, small pieces of coal.
 15328. Q Do you say that they could not come from the 4th Right or that they might have come from it? A I think it is probable they came from the 4th Right.
 15329. Q You made various visits to Kewstoke since that time to know how you have been Chief Inspector? A Yes.
 15330. Q I suppose you know something about the output from the colliery? A Yes.

18989. Q It was pretty regular during the last six hours, *six hours* before the accident, was it not? A I would think it was.
18990. Q Do you know whether there are any delinquents in connection with the mines in the mountain? A I have heard that statement in the Adjudication Court.
18991. Q Then it requires that the work shall be done with some provision in order to maintain a regular supply of Mount Kemble? A Yes.
18992. Q Would you not say that this pit is one of the best equipped collieries in New South Wales? A Well, the general arrangements of the mine, so to distribute and handle, are very good.
18993. Q Would you go further and say that it is one of the best equipped mines in the State? A Yes, I am prepared to say so.
18994. Q And that has been the experience produced as your record from time to time by different visits to the colliery? A Yes.
18995. Q Now, did you know anything about a special book that the Manager kept for the use of the day deputies in addition to the book kept for the night deputies? A Is that the book for making reports is not required by General Rule 4?
18996. Q You know that under the "Coal Mines Act" the night deputy has to make reports of his work during the night in a book? A Yes.
18997. Q There is no provision in the Act for the day deputy to make any record of his work during the day? A No.
18998. Q Would the keeping of a book for the day deputy be a check on his work during the day? A Yes.
18999. Q And it would be a further guide to all persons concerned as to the general condition of the mine? A If they had access to that book it would.
19000. Q Do you know whether a book of that kind was kept by Mr Rogers? A I believe so.
19001. Q For some years? A I believe so.
19002. Q You remember that all these books were put in evidence at the Coroner's Inquiry? A I do not remember that book.
19003. Q The books under General Rule 4 were.
19004. Q Do you remember Evans, the deputy, being asked about the matter? A I do not remember now.
19005. Q They were some books in diary form? A I do not remember.
19006. Q Have you got Mr Butler's note-book, which you were asked about yesterday? A I have asked him to come in to-morrow to bring it with him.
19007. Q Now among the possible causes of explosion I think you mentioned the electric current—under what conditions would that be possible? A The cable conveying the electric power breaking and coming across.
19008. Q Has such a case as that actually happened? A Yes, there has been an explosion from that cause.
19009. Q Where? A It is mentioned in the Imperial Inspector's Report, by Mr Stokes, in the Midland district.
19010. Q Exactly? A In the reports for 1900.
19011. Q What caused the explosion—did the spark come in contact with dust? A No, with fire-damp.
19012. Q The cause? A It would be a white heat spark.
19013. Q It takes a white heat spark to fire fire-damp away, is the hydro-carbon? A Yes.
19014. Q Now, Mr. Wade, I think fire-damp ignites at 1,100 Foh, which is just about white heat? A Yes.
19015. Q Mr. Roberts? A A fire-damp would not fire fire-damp? A It might if it were in the mixture some time.
19016. Q Yes, Mr. Wade? A It takes a very great heat to fire it? A To fire the hydro-carbon. A spark from the old wire will not fire lighting before the safety lamp has been known to fire the gas.
19017. Q Mr. Wade? A Where was the electric cable—in the mine road? A I think it was in or near the face of the long-wall working.
19018. Q Mr. Roberts? A There was no cut in the mine at the time? A There was no cut in the mine at the time.
19019. Q Mr. Wade? A Another possible cause is from the compression of air—not that what you say? A No, I do not think that is possible.
19020. Q How did you put it before—you made some reference to it? A I made some reference to explosion contributed to by falls of stone.
19021. Q In what way did you apply that? A The explosion would be caused by sparks from the stone.
19022. Q And not by the pressure? A I do not think the pressure would be the cause.
19023. Q Would it cause an explosion if there were no fire-damp? A No.
19024. Q Mr. Roberts? A Do you remember an explosion in an air-compressor in the Ryhope Colliery? A Yes.
19025. Q Was there any coal dust present? A Yes, there was a considerable amount of coal dust and city water at the bottom of the receiver.
19026. Q I thought that it was simply a deposit of oil? A I think that it was determined that it was coal-dust and city deposit.
19027. Q Did not Professor Bolton make the experiments with emulsion about? A Yes.
19028. Q Did he not prove that coal-dust would ignite by compression? A I think that coal-dust ignited at a temperature of 300 Foh.
19029. Q A compression of these atmospheres was it not? A I forget just now. I think I shall be able to get the pressure. I take the book and can produce it if necessary and give the whole of the particulars.
19030. Q You might produce it to-morrow. Will you not admit that it is possible to produce the ignition of coal dust without the contact of any flame at all, simply by heat? A Yes.
19031. Q Without any flame at all? A Well, you have the character of the explosion in the air-compressor where there was an ignition of coal dust mixed with the vapor from the mineral oil. There would of course be some resulting from the ignition.
19032. Q But the cause of the ignition was the rising of the temperature through the compression of the air? A Yes, there was no flame suggested.
19033. Q The cause? A Was there anything to show what temperature the air was raised to by the compression? A I think the machine was working at, say 50 lb in the square inch, and that according to calculations, if I remember rightly, produced a temperature of something over 300 Foh.

15670. *Mr. Wade* | Q Two hundred and ninety-one degrees will produce ignition? A It did in certain experiments made by Professor Deffies.
15671. *Mr. Deffies* | Q Of pure coal dust? A I think it was, but I will have to look it up.
15672. *Mr. Bunker* | Q Where was the result? A Yes.
15673. Q Can you produce it? A Yes.
15674. Q Perhaps you will do so? A Yes.
15675. *Mr. Wade* | Q The temperature was calculated on a theoretical basis?
15676. Q There was an air-tight cylinder and it is only a matter of the actual compression? A Quite so.
15677. Q Do you know whether the temperature of the air was raised by a violent impact of air against stationary air, in space, not in an air-tight vessel? A I suppose there would be a certain amount of compression.
15678. Q Does you get compression you would get heat? A Yes, an increase of temperature.
15679. Q If you have a rush of air going down the roadway of any mine, and it encountered other air there, would you get compression? A There would be a certain amount of compression.
15680. Q And increase heat? A A slight increase of heat.
15681. Q Now a temperature of 300 degrees would burn a man's hair quite apart from the question of heat, when you find that it will ignite coal dust? A I am not sure, I should prefer to leave that to a medical man.
15682. Q I suppose the highest you have gone through in this world is 180 degrees? A Hardly that. I should think
15683. *Mr. Deffies* | Q Has 300 degrees been proved to ignite coal dust?
15684. *Mr. Wade* | I have the papers here myself, 250 degrees is the actual figure given.
15685. Q Telling of the tests of coal dust made in England were not these very severe tests? A They were.
15686. Q Were they not much more severe than you would expect to find in the ordinary course of practical mining? A Yes, I have no doubt the tests were made on air in order to give the most favorable results for producing an explosion of coal dust.
15687. Q There was an experimental mode at the time of the Chamberlain Commission by means of doing a shot into a box, which had in it air, thoroughly saturated with dust? A That was floating in the air.
15688. Q The air was saturated with dust? A I have no doubt, but I do not remember it.
15689. Q It was shown that the dust would ignite through the shot being fired into it? A Yes.
15690. Q Was not the complaint made then that you could not have this test in a working mine? A I think it was.
15691. Q Was not the reason given that the conditions of the air for that experiment were such as could not be found in a mine, because, if they were, the air would not support life, owing to the air being so thick with dust? A I do not remember that—it may be so.
15692. Q With regard to the experiments which were made at Watwick—did the dust lie on top of the charge—that is a heap of dust? A Yes, and the flame was propelled into them.
15693. Q And a mound of dust was heaped up round the cannon itself? A Yes.
15694. Q So that you would say, under the conditions under which the experiment was made, that it would be fair to consider the Mount Kemble dust as violently explosive? A I do not exactly follow you.
15695. Q I say that under the conditions under which the test was made at Watwick it would be fair to consider that the Mount Kemble dust was violently explosive? A Yes, as the result of the experiment.
15696. Q You would not apply that result, unqualified, to Mount Kemble coal dust, under the ordinary working conditions, would you? A Well, the conditions under which the tests at Watwick were made were very severe, and would not be likely to occur even in a mine.
15697. Q What I want to get at is that, the expression, "violently explosive" might mean to the ordinary mind—that is to the public—the idea that Kemble coal dust is dangerous? A No, not in that way.
15698. Q It is only explosive if the same conditions were applied to it in the same as were applied to it when it was being tested? A Yes.
15699. *Mr. Bunker* | It is not that it explodes more easily than other coal dust, but that it is more violent by comparison with other coal dust when it does explode.
15700. *Mr. Bunker* | I think the degree of explosibility are indicated by the three terms which are used—in the regulating of explosion.
15701. *Mr. Bunker* | It is the force with which it explodes.
15702. *Mr. Bunker* | Yes, I am it is stated that under the heading of Violent Explosions, there was placed those specimens in which the volume of flame was greater than in the other two cases.
15703. *Mr. Wade* | Q If you apply the test which was used at Watwick, then the explosion of Mount Kemble dust would be a violent one? A Yes.
15704. Q You do not gather from that, that the Mount Kemble dust would be more liable to explosion than any dust which is characterized as "mild explosive"? A I think that it is intended to convey that when it does explode it is more violent than some other dusts.
15705. Q Not that it is more likely to explode under ordinary mining conditions? A I think not.
15706. I may state that I have here, Your Honor, extracts given me, by Mr. Deffies, giving a table showing the heat produced by compression.
15707. *Mr. Bunker* | By what is it prepared?
15708. *Mr. Wade* | It is an article from the Transactions of the Federal Institute of Mining Engineers.
15709. *Mr. Bunker* | Are these tests made in the upholder by pumping air into it, or by ramming by a piston. It is easy to calculate the compression when it is forced into the cylinder by a pump, but I do not think it would be so easy to calculate it if the compression is produced by the ramming down of a piston. I have now before me paper lighted by being consumed by a piston.
15710. *Mr. Wade* | I think that one simply compresses would do it also.
15711. *Mr. Bunker* | I think that you could calculate the compression easily by pumping into a cylinder, but I should be very sceptical about the calculations made by the other process.

- 15712 Mr. Wade? Q. Coming to No. 1 main road again, is this correct—in your opinion did any flame pass up the 4th Left from No. 1 main road? A. From my own observations I did not notice any sign of flame, and a sample of coal-dust which was collected from the floor of the 4th Left was examined, and reported not to have ignited.
- 15713 Q. Now the dust on these props in the 4th Left was on the side nearest No. 1 main road? A. I did not notice much dust on the props there, it was mostly on the bottom.
- 15714 Q. There were not too many props to start with? A. No.
- 15715 Q. Did the dust seem to have been deposited from No. 1 main rope road? A. I do not remember having observed it.
- 15716 Q. Did the dust on the floor have the appearance of having been blown into there? A. I think some of the dust had been blown there by the explosion.
- 15717 Q. Did it seem to have been blown there? Did it have the appearance that you would expect it to have if it had been blown in there by the wind alone? A. The appearance of the dust did not strike me in any way.
- 15718 Q. What was there in the appearance of the dust not consistent with it having been blown in there by the wind? A. There was nothing particular about the appearance of the dust.
- 15719 Q. Was it inconsistent with that theory? A. I think it might have been blown there by the wind, if the wind was sufficiently strong.
- 15720 Q. Suppose you were dealing with the 4th Left alone, and were asked to confine yourself to appearance there only. Was the appearance of the dust there in any way inconsistent with it having been blown there by the wind? A. I do not think it was.
- 15721 Q. Now, in that particular 4th Left, there happened to be more dust than in any other part of the mine near there? A. I noticed more dust there.
- 15722 Q. Now, take the 4th Right. Did you notice any signs of flame having passed down that Right? A. I cannot say that I did.
- 15723 Q. I think you stated that in coal-dust explosions, you may travel many yards from the initial point of the explosion without seeing any signs of the explosion? A. Yes, that has frequently been observed.
- 15724 Q. Has not this been observed—when you come to a larger air-curtain, you find signs of the explosion? A. Yes, I think that is in accordance with some scientific opinion.
- 15725 Q. Was that not one of the conditions established on the explosion at Canby in a series of experiments made by Mr. Donald Stewart, where between the start of each explosion he failed to trace any sign of explosion? A. That is so.
- 15726 Q. And where those different explosions were produced was there not always a little longer air-space—do you remember that? A. I do not remember it.
- 15727 Q. Is not this the principle—you may get sufficient heat to ignite the coal dust, but not sufficient oxygen to bring about an explosion—you may go a little further on, and when you get an increased supply of oxygen that ignites the combustible in the dust, and you get an explosion? A. I think that Donald Stewart issued several such cases of explosions in fact. The same way as is explained by Godding's experiments, when he states that one explosion follows on another.
- 15728 Q. With respect to Canby, would an increased supply of oxygen bring about an explosion? A. I do not know how you could get an increased supply of oxygen in a single road.
- 15729 Q. Take the 4th Right—have you not got a larger air-space there? A. Yes.
- 15730 Q. And you would expect to find some further increase of explosion there under ordinary circumstances? A. There is the separation of a door between the two roads in that case.
- 15731 Q. But the door was not standing on the No. 1 rope road, and, therefore, there was a bigger area there? A. Yes.
- 15732 Q. What is the difference between the side of the two headings? A. Ten yards.
- 15733 Q. And the door would be 5 yards back from the side of the main road? A. Yes.
- 15734 Q. And the cut through is 3 or 4 yards? A. Yes.
- 15735 Q. And about 5 feet high? A. Yes.
- 15736 Q. There would be a fair amount of oxygen there to help to develop the explosion? A. There would be a fair supply at that point.
- 15737 Q. If the explosion took place at young Morrison's light—what do you say about that? A. That was one of my opinions in fact.
- 15738 Q. I am not dealing with the outside side of the 4th Right, but with the inside side. You said that the first explosion, 1845, took place at young Morrison's light? A. No, I think the first ignition took place somewhere near the 4th Left.
- 15739 Q. By whose light? A. Probably Morrison's.
- 15740 Q. I am speaking of young Morrison, the wheeler, who was killed on the road outside the 4th Left? A. Yes.
- 15741 Q. You think that the first ignition, about the 4th Left, was at that point? A. I think it took place somewhere near the 4th Left, at Morrison's lamp.
- 15742 Q. Do you mean to say that there was an actual explosion? A. An actual explosion.
- 15743 Q. Where you get an actual explosion, does not the force reflect in all directions? A. Yes.
- 15744 Q. Did you not see signs of indication of force at the 4th Left? A. There were signs of fire in the 4th Left, also signs to the south, and also to the east.
- 15745 Q. Now, if there is one point not touched on yet, and I do not know whether a deficiency has been worked out from it. Assuming there was a body of inflammable gas, with its source somewhere about the 4th Right, then a blast into the heading road and distributed along that road, the air moves slowly up all the time, and the center of the gas would, therefore, remain for an instant almost exactly opposite the 4th Right. Supposing that body of gas extends itself as it would do to the south, and reaches Morrison's light—and suppose it is ignited by that light, would the fire of that gas being lighted by Morrison—would that flame be taken at the source of the explosion—or would it not be that the lighting taking place at the reverse north end of the inflammable gas, it would flash to the south, and thus the source of the explosion be about the source of the body of gas? Then, although the gas might be lighted at the northern end, would not the source of the explosion be previously about the middle of the body of inflammable gas, assuming

that it was the least likely there. Can you give any center, for what would be an instantaneous beginning, or would you say it is that the center is the body of the explosion center? A I see your Honor's meaning. Of course as soon as the motion came in to lighted, the flame would spread equally through the body, and I would not like to say whether the actual center of that motion would be regarded as the center of the explosion or not.

15214. Q If there was a body of powder in the barrel of a gun, open at both ends, and you lit it at one end, you would expect the explosion to be almost symmetrical out of each end of the barrel, although the powder would not carry chemical action as quick as gun would? A You are supposing that the explosion commenced in the middle of the barrel?

15215. Q No, I am supposing that the powder is lighted at one end—but would it not act as if the center of the explosion were the center of the powder? A Practically it would.

15216. Q Practically the same thing would apply in gas—if anything, wouldn't? A I suppose it would.

15217. Q Did you mention, when giving evidence about the first ignition of gas by Morrison's light, to say that the explosion radiated from that point—did you admit to survey that morning?

A I distinctly speaking, yes.

15218. Q How do you account for the rather outside Morrison's light being drifted off with dust on the outside side, the flame evidently having come from the 4th Right? A I think that is the position the stuff would be found in.

15219. Q If the system took place at Morrison's light, the evidence of dust from the 4th Right edge was inconsistent? A I think it is possible that the deposit of this stuff may have been caused by the same flame which discharged the screen doors, although there is not much importance to be attached to the rubbish in front of the screen.

15220. Q It must have been a considerable amount of dust to drift there up light with small and? A A considerable amount of dust, no doubt, but nothing like the dust occurred in same explosion.

15221. Q It is not easy to conceive that being done by a blast of air set caused by an explosion? A No, it is not easy.

15222. Q Did not the dust come in succession in amount from the 4th Right? A I did not observe that.

15223. Q Were there any signs of dust going outwards from Morrison's light that you saw? A There was very brilliant the road between the 4th Right and the 4th Left, so far as indications of dust were concerned.

15224. Q Was there not a rail which had been in position outside of Morrison's light, found ledge of Morrison's light? A Yes.

15225. Q Look at the plan (No. 38). There is a point marked with B in the plan, just at the top of the 4th Left edge; then you have a D outside of Morrison's body. The rail on this plan is ledge of Morrison's body? A I do not think it is but to assume that the system took place exactly where Morrison's body was found.

15226. Q He may have travelled? A He may have travelled in here before some debris.

15227. Q Do you know where Morrison's work took him? A His duty was to illuminate the empty tube outside of the points.

15228. Q Are not all the centers of flame between the 4th Left and the 4th Right—edges? A Yes.

15229. Q Do you remember saying at the moment that the contradictory forces which travelled you were between the 4th Left and Morrison's plan, and you spoke about Drury's body and some wire entanglements?

A I do not remember just now.

15230. Q What you said at the moment is reported on page 80 as follows:—"The contradictory evidences of these in No. 3 I have been the contradictory state with reference to the relative positions in which the body, arm, and head of Drury had been found, the entanglement of the telephone wire amongst three empty tube, a being attached to the in and of one of these tube, round the drive bar, and directed end-to-end one of the bundle of the same tube at the out-end, and generally speaking, the difficulty in ascertaining the direction of these amongst all these tube between No. 4 Right and the floor?" A I remember that.

15231. Q Leave out all about Drury's body, the next difficulty was the entanglement of the telephone wire round the tube? A Yes.

15232. Q Have you looked where the wire came from? A From the outside edge.

15233. Q These tube had been driven into? A Yes.

15234. Q Another tube with wire round it was ledge of the 4th Left? A Yes.

15235. Q It was driven edge into? A Yes.

15236. Q You found wire attached to the plug on the 4th Left? A Yes.

15237. Q Are there any indications of holes between the 4th Left and the 4th Right, going outwards?

A No, I do not think so, unless there are contradictory evidence as to Drury.

15238. Q Thinking the ground fact. There is only evidence of two going outwards between the 4th Left tube and the 4th Right tube? A No, I do not think there is.

15239. Q Is there any evidence of three going outwards between the 4th Left tube and the 4th Right tube? A No, there is not.

15240. Q Where do you say there was force to the east over the 4th Left? A The force from the door opposite the 4th Left travelling east.

15241. Q Where does the force come from? A From the door.

15242. Q Where does the force come from? A From the door.

15243. Q Where does the force come from? A From the door.

15244. Q Where does the force come from? A From the door.

15245. Q Where does the force come from? A From the door.

15246. Q Where does the force come from? A From the door.

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15255. Q Where does the force come from? A From the door.

15256. Q Where does the force come from? A From the door.

15257. Q Where does the force come from? A From the door.

15258. Q Where does the force come from? A From the door.

15259. Q Where does the force come from? A From the door.

15260. Q Where does the force come from? A From the door.

18781. Mr. Wade. Q Was it blown open, or was it blown down, or had it disappeared? It was forced through an upright towards the travelling road or return.

18782. Q Was it on its hinges or just blown open? A It was not blown open, it spread to the 11 main level, but it was blown right through the upright on one side.

18783. Mr. Alderton. That is consistent with what I said about the door on the 11th Right. It was blown against its natural position.

18784. Mr. Wade. Q Under ordinary conditions of the explosion were ignited by either Ashton's or Morrison's light, on the 4th Left, would you not expect the explosion to be heard along the 4th Left heading on the dust? A Yes, would, and it is probable the explosion has gone along there.

18785. Q But there is no evidence of it? A I think that the evidence I have heard with reference to the burning of Stafford, and also the evidence of a witness named Stafford who was working in Price's flat above it.

18786. Q That brings you back to the point that from facts outside the 4th Left you think the explosion may have passed through it? A Yes.

18787. Q And in the 4th Left there is no evidence of it? A There is evidence of force.

18788. Q I am speaking of an explosion. You said that you say was consistent with a mere blast of wind? A Quite so, if there was sufficient pressure.

18789. Q Is it not usual, in case of explosion, to find dust deposited on the opposite side to that from which the explosion came? A It is usual, although there is occasionally a little deposit on both sides.

18790. Q You do not find deposits of coke dust on the side on which a gas explosion comes along? A There is no dust at all in gas explosions.

18791. Q I mean a gas explosion mixed with dust? A Yes.

18792. Q You say that it is usual to find deposits of dust on the side opposite to that from which the explosion came? A Yes.

18793. Q Do you know of any instance where dust has been deposited on the side from which the explosion came and so that side alone? A No.

18794. Q It is a kind of back lash which deposits dust on the side opposite to that from which the explosion came? A Yes, it is a retrograde action.

18795. Q Do you remember examining the props on the line of air through left of No. 1 rope road, next to Forester's level and Ashton's place? A I saw a little dust there.

18796. Q Was not the dust on the side of the props recent dust? No? A I think that was some dust on both sides.

18797. Q Can you say whereabouts? A Not far from Ashton's place on the edge side.

18798. Q Which side would that be? A The greater quantity was on the west side.

18799. Q The side nearest the wind working level? A The working face is towards the north.

18800. Q What was that, dust or coke dust? A I think it had been subjected to flame.

18801. Q What was it—what would you call it? A It was not so severely baked as some dust collected in the back heading, but I think it had been subjected to flame.

18802. Q How you prepared at the present moment to say there rather than here? A I think it would be flame.

18803. Q You can get dust partially mixed by heat, without flame—you admit that? A Yes, I believe you can.

18804. Q Can you tell from the appearance of it whether it is the result of heat without flame, or the result of flame itself? A I do not think you can.

18805. Mr. Alderton. Q Was any of that dust mixed? A Well, it was not mixed to the extent that it was in the back heading.

18806. Q Was it mixed at all? A Well, I did not have any of it examined by the microscope.

18807. Q Was it not a glaucous? A I do not know, I am sure.

18808. Q You can burn coal into a pure without much heat? A Yes. Historically was not mixed in the same dust you make coke artificially, but I should say it had been deprived of some of its volatile hydrocarbons.

18809. Q Mr. Wade. Did you have any analysis made of the dust gathered from near Ashton's place? A No.

18810. Q How many samples did you obtain of what was called dust? A Twelve samples were obtained from the second coach down to a point, the last one being at the turn 300 yards from the 4th Left travelling road.

18811. Q One hundred yards only? A No, no, no.

18812. Q Did you not have any sample taken on the edge side? A I took samples from the back heading, near where the Morrison were found, and examined them in the microscope, but I had no special report made.

18813. Q You examined them microscopically from Morrison's place? A Yes.

18814. Q You came to the conclusion that they were mixed? A Yes.

18815. Q There is a distinct difference in appearance between the mixed dust from Morrison's place, and the dust you saw near Ashton's place? A It was very markedly mixed in Morrison's place.

18816. Mr. Alderton. Q Was not the dust which you took from Morrison's place taken from the side? A Some of it, and also some of it from the props.

18817. Q Not from the floor? A No.

18818. Q The twelve samples were taken from the floor? A No, from the timbers and the sides.

18819. Q The dust from Morrison's place was partly? A Yes, it was.

18820. Q The others could be swept off easily? A Mr. Watson collected them, he told me that he got them off the timbers near the roof.

18821. Q They were not posted on light? A Not in the same way as the deposits were found in the back heading near Morrison's place.

18822. Mr. Alderton. Q Have you got the particular place where the twelve samples of dust were collected from? A Yes. Mr. Murray, the Auditor of the Mines Department made a report with reference to them.

18823. Q Do you remember Ashton Road giving evidence at the Coroner's Court? A Yes.

Witness—A. A. Aronson, 12 February, 1933

- 15012 Q His placed himself in No. 2 Right close to the corner landing? A I think he said he was up there.
- 15013 Q How far is that from the 4th Right?—by aisle? A I should like to know the exact points.
- 15014 Q From the lounge door? A In a straight line.
- 15015 Q No, as the air would go? A Somewhere about 40 inches.
- 15016 Q A little over half a mile? A Yes.
- 15017 Q How far is it from the 4th Right to the 6th Left? A About 8 inches.
- 15018 Q About 500 yards so near as possible? A Yes.
- 15019 Q Adam Frost sat in his evidence "There was a great blast of wind came up the 2nd Right while I was there, it blew out my light." He also said "It nearly blew us off our feet," and likewise "I then walked 200 yards, towards the main road and met smoke and dust." A The force of the explosion was estimated by about thirty tabs which had travelled up the 2nd Right rope road, and the force would naturally blow his light out.
- 15020 Q Do you not think that his light was blown out by the displaced air, in front of the blast of wind? A I think it would be blown out by the blast of wind itself.
- 15021 Q Do you not think that the blast of wind would displace the air in front? A Yes.
- 15022 Q His light might have been blown out by the displaced air in front of the blast of wind that came from the 4th Right? A I do not think that is at all probable.
- 15023 Q Suppose there is a blast of air coming out of a narrow passage—do you not think that it would drive a certain portion of air in front of it? A Yes.
- 15024 Q Do you not think that what would put out Adam Frost's light was a cushion of displaced air—displaced by a blast down the 4th Right? A I do not think so, having regard to the facts shown to have been carried to the 2nd Right. I think that that same blast also blew his light out in coming up that 2nd Right rope road.
- 15025 Q The air that blew his light out was the actual air that came out of the 4th Right? A I do not say so.
- 15026 Q Or was it a cushion of air in front of it—it makes all the difference? A I think that the force exerted on those tabs was caused by the explosion and that the force of air going up that rope road blew his light out.
- 15027 Q Would not the force of the explosion, as shown by the condition of the tabs, have displaced a body of air in front? A Yes.
- 15028 Q Could not that same body of pure air have blown his light out before the air from the 4th Right got near the light? A I do not think that any force of pure air produced would be likely to disturb those tabs in the way they were disturbed.
- 15029 Q Will you admit this—if you have a large body of air rushing through a narrow passage, that will drive ahead of it, like a cushion, some air already there? A Yes.
- 15030 Q Supposing a blast of air came in the 6th Right, before the actual blast which did the damage to the tabs in the 2nd Right, and it drove before it a certain body of air in advance? A I do not think that any force of air that came out of the 4th Right in that way would disturb the tabs in the way they were disturbed.
- 15031 Q Mr. Bruce Smith? Q You move not so close? A No.
- 15032 Q Mr. Wade? Q Call it air or gas, or whatever you like—would not whatever it was displace in front of it a certain body of pure air? A Yes.
- 15033 Q And is it not probable that Adam Frost's light was put out by the pure air which came in advance of the explosion air from the 4th Right? A Yes, I think that is possible.
- 15034 Q Would not the same explanation account for Hammond's light being put out? A I think that might be the case if the force of air was sufficient.
- 15035 Q Then the force of air which was displaced would put out Hammond's light? A I do not think Frost's light or Hammond's light would be put out by the force of air and gas which came out of the 4th Right.
- 15036 Q No, I have been saying that all along. The explosion air would split—before and after. Would it not drive before it a small quantity of air that did not come out of the 4th Right? A Yes, no doubt it would.
- 15037 Q Would not the cushion of air, not coming out from the 4th Right, be the air which in all probability put out Hammond's light? A No, I do not think so.
- 15038 Q Why not? There would be a cushion of air in front of the blast? A Hammond was working through some doors from the No. 1 main level.
- 15039 Q Could not the blast go by the travelling road in the 4th Right? A A certain force might go up the travelling road.
- 15040 Q And would not the explosion currents have in advance of it a certain cushion of air that did not come from the 4th right? A Yes.
- 15041 Q Would not the air, not coming from the 4th Right, be the cause of the light being put out—I mean the cushion of pure air, before the explosion currents got to it. [No answer.]
- 15042 Q Mr. Bruce Smith, I think that is a positive form of questioning.
- 15043 Q Mr. Bruce? Mr. Wade is asking the witness whether he will or will not assent to a hypothesis.
- 15044 Q Mr. Wade? I am asking about a cushion of air, displaced in front of the blast.
- 15045 Q Mr. Bruce? If there was a cushion of air in front it would put the light out, but that only goes to show that if the conditions were such as you say, a second explosion would not take place from the actual light as the cushion of air would blow it out.

[The Commission at 4 p.m. adjourned until 10 o'clock the following morning.]

PROCEEDINGS, 12 FEBRUARY, 1905—10 a.m.
 [The Commission met at the Land Appeal Court, Burlington]

Present:—

C. E. B. MURRAY, Esq., D.C.J., (PRESIDENT).

D. A. W. ROBERTSON, Esq., COMMISSIONER.

D. BITCHIE, Esq., COMMISSIONER.

Mr. Deane Smith, Barrister at Law, instructed by Mr. Wood, Crown Solicitor's Office, appeared on behalf of the Crown.

Mr. A. A. Lynght, Solicitor, appeared on behalf of:—

- (a) the representatives of deceased miners, whether, in, (victims of the explosion);
- (b) the employees of the Mount Kemble Colliery (miners, whether, in);
- (c) the Miners Colliery Employers' Association (the Southern Miners' Union).

Mr. C. G. Wade, Barrister at Law, instructed by Mr. F. Curran, Solicitor, appeared on behalf of the Mount Kemble Coal and Oil Company (Proprietors of the Mount Kemble Mine).

(Mr. J. Gullish, Secretary to the Commission, was present to take shorthand notes of the evidence and proceedings.)

Mr. A. A. ATKINSON, previously sworn, was further examined as under:—

Cross-examination by Mr. Wade [continued].—

18953 Q There being that passage, Mr. Atkinson, that I was referring to about the character of the dust that is necessary to produce or encourage an explosion. Is Question No. 2115 in the Chas. H. Royal Commission. This is a question by the Chairman to Mr. W. N. Atkinson:—

"A sufficient quantity, and, thirdly, an existing cause like a flame can do it." A Yes, and partly,

that covers the question I put to you previously, does it not? A Yes, that is, with coal dust and air alone.

18954 Q Yes, Now, is not one of the characteristics of a fire damp explosion the shattering effects that are produced? A Yes, there is a force repeated in all directions from the centre at the commencement.

18955 Q Is not the distinction this: that the force is shattering rather than driving; take its action on a stopping, for instance, does not it tend to shatter that stopping rather than to blow it away? A No, I think it would blow it away, in the case you say a coal dust and gas explosion. I am unable to make any clear distinction as that way.

18956 Q At a mine at the seat of the actual explosion, do not you get a great concussion and rapid expansion? A Rapid expansion, and, consequently, force.

18957 Q And is not the most likely to be a coal dust than if you have a blast coming up? A I am unable to make the distinction in that way, but a purely gas explosion is very local in its effects, as compared with a coal dust and gas explosion.

18958 Q I do not say it is local, but I take the actual locality where the effects are shown, are not the effects more a shattering than a blowing away? —

18959 Mr. Atkinson Q Would not it be the same distinction as, say, between dynamite and gunpowder; they are both explosions, but the one is more violent than the other?

18960 Mr. Wade Q After all, would not it depend in a great extent, upon the mixture? A Yes, the explosion would probably be more rapid than the coal dust explosion.

18961 Mr. Atkinson Q As a matter of fact, a coal dust explosion is really a long drawn out thing, comparatively speaking? A Yes, it is slower than the pure gas explosion.

18962 Mr. Wade Q However, you draw no distinction even at the seat of any particular explosion? A I am unable to make any clear distinction in that way that you indicate.

18963 Q Well, in the case No. 1 at Mount Kemble, you found miners crushed up, for instance, did you, or anything like that—no wonder does, to be quite correct? A No, I do not think any of them were crushed up.

18964 Q For instance, they died as the air rushed between the two headings near the 30th Right, that, apparently, I think, was blown through an stopping rather than crushed? A It is the one opposite the 4th Left showing road that shows the most distinct signs of force.

18965 Q Yes, and that way, was where it had been apparently blown through its stopping—it was not in any way crushed? A It was forced through its stopping.

18966 Q I have not been able to follow your evidence very closely, but as I understand you to say that, after the first igniter took place at Morrison's light, there was a further ignition on the light at Morrison's? A Oh, I think that the whole thing, once commenced, was continuous; but I think it is possible that there was a further increase of force, due to a small percentage of gas in the air, near the face of those headings.

18967 Q Then do you say there was flame between the points where Morrison's light was and close to the face of No. 1 heading? A That is the best heading?

18968 Q Yes, where you say there was a further source of force? A I think so.

18969 Q The flame would not come any longer in Morrison's light and then die out, would it,—there is no flame between a flame through the whole of that distance? A It is a very difficult to understand the passage of flame in an explosion. There appear many instances where, over long distances, there are no evidences of flame, but where it is well known that the explosion has passed.

18970 Q Yes, and is not it also admitted in those cases where you have an explosion at A, and then a length of road with no signs of flame, and an explosion at B, that the conditions at B have brought about a fresh explosion, and, possibly, a fresh flame, and that there may have been no flame between A and B?

A Yes, I think the explanation is given somewhat in that way.

18971 Q That is, you may get an increased supply of air at the second point B, which will bring about a condition of explosion which did not exist between A and B?

18972 Mr. Robertson Q Is it not that the intensity of the explosion is increased by the addition, possibly, of more air? A Yes, there are very distinct evidences of increase of force at different points in coal dust explosions.

[Enter A, A. Adams, 12 February, 1881.]

15479 Q But they are not separate and distinct explosions? A Well, it is very difficult to separate them, there being all one continuous action, as it were, by different degrees of intensity at different spots. It is all one continuous action.

15480 A [Pauses.] Q What I want to know is this: between two points, A and B, which evidently are the seats of two explosions, are you here, between those two points, intense heat without actual flame? A I think that is the evidence afforded by many explosions—by the expansion on many explosions of experts.

15481 Q Then what brings about the evidence of a second explosion as an increased supply of air—not that supposed to be so? A I should think so, there is the only supposing agency for the combustion.

15482 Q So that, as the air arrives, you would be less likely to find an increased supply of air, and, therefore, a further source of flame—is not that so? A Unless there were suitable openings of air into, affording fresh air.

15483 Q Is there anything in the face of Sa. I leading which, you think, would give an increased supply of air, that would, in its turn, lead to a fresh source of flame? A Yes, I think that the fact that there would be a source of air, probably, always going up the back leading itself.—[Interposed.]

15484 Q Where from? A From the 4th Right.

15485 Q Then it would come in at the position of the 4th Right, do you mean that, where the 4th Right joins the back leading? A Yes.

15486 Q If that is so, would not put expect to find a new increase of force at the 4th Right, rather than 150 yards further up—you are the air is quite fresh at the 4th Right? A No, I am supposing that there is an independent supply of air, which goes up the back leading towards Marce's place, and which would meet in any increased combustion now when they come.

15487 Q You are there in a door, marked "D" on the plan, between the back leading opposite the 4th Right and the front leading? A Yes.

15488 Q Was not that door between those two leadings blown from the front leading to the travelling road? A The buildings at the side of the door certainly were.

15489 Q And the door was open? A The door was open.

15490 Q So, evidently, the flame had gone in there from the front leading? A Yes.

15491 A. Johnston. Q Was not the air that through opposite Marce's place the only opening on either side of the Sa. I was leading from the 4th Right—namely by a door stopping in a door? The cut-through on the outside side of that was the one through which the air travelled in Marce. The other place mentioned.

15492 Q That is the place I mean: all the other cut-throughs or passages made were closed by doors? A Doors or stoppings.

15493 Q So that the cut-through would be the only possible place where there would be an access of oxygen—fresh air? A Well, there is always a source of air through doors.

15494 Q I know that, but that is the only place where the explosion could expand, and kick up, as it were, fresh oxygen? A With the exception that a small quantity of air would come through the door and go up the back leading.

15495 Q Quite so, but this is the only opening from the 4th Right all along that was leading out closed by a stopping or a door? A That is so, the cut-through on the outside side of the cut-through opposite Marce's place is the cut-through through which the air goes to the Marce's.

15496 Q And, if explosion increase in intensity in the neighbourhood of larger areas, that would be the place where it would increase in force? A With an additional supply of air, no doubt.

15497 Q Yes, but that is the only place where it could? A I do not exactly follow you on that.

15498 Q Well, you know, I suppose, what is Donald Stewart's theory? Mr Wade is explaining it now. It is that the cause of increased rates of intensity in explosions is due to larger areas of ready supplying increased volume of air? A Yes, I believe that is his theory.

15499 Q Well, this is the only point where that could take place along the main leading? A What point?

15500 Q That cut-through next to Marce's place where the air divides. Do you see, Mr. Adams, that cut-through that supplied Marce's place with air in the only opening from the 4th Right right into the main leading too, every other opening is closed up by —? A By either wooden doors, or stoppings, or masonry doors.

15501 Q Then that is the only opening where this could take place, this expansion? A Well, at the 4th Left there was only masonry doors.

15502 Q But it is closed by a masonry door? A Well, masonry doors do not so effectively prevent air going through, as wooden doors, or stoppings, say.

15503 Q No doubt, but to some extent they do? A To some extent they do, yes.

15504 Q What I want to find out is this, that the only possible place where this increased area of roadway is to be found is at the cut-through supplying Marce's place with air, of the others are closed by doors and stoppings? A Yes, that is correct, but those places are closed by either doors, or stoppings, or masonry doors.

15505 A. Johnston. Q There is one element that has been lost sight of all through, it seems to me, in these conversations, and that is, that, as is closed time to—I mean that we may treat these as more or less enclosed spaces—there is a tremendous compression of air in front of the main behind that we call the explosion; and as it progresses that compression keeps increasing, until, in point of fact, a certain tension is secured at which enables the supply of oxygen to be exhausted—that is, of course, that nitrogen and hydrogen must be compressed into a smaller compass—and, as point of fact, this oxygen is the supply for a fresh reaction, which supplies itself by a larger chamber to which the explosion reaches, that supply, ahead of the explosion, and always be considered to, at different rates, the, possibly, complete the evidence of explosion; so that you would expect, if the flame reached through to kind of blow, to find a series of explosions following one another almost continuously, as you can, if the explosion runs down a long tunnel.

15506 Q I do not take the case? A In the case of a real dust explosion.

15507 A. Johnston. Q Then you have the element of the dust dust, that is the fact, and the other element you want is oxygen. If you have sufficient heat to cause an explosion, you have the chemical elements of explosion continually travelling, and bring the oxygen, as the expanding gas forces it on from behind; and the other the coal dust, the fact, present in the air, pushed up, and driven along by the gas of air that is being forced along ahead of the explosion, and work the explosion. Explosions of course is a force which means a great deal.

15508 A. Johnston. Q It presupposes a starting force.

12915.

19440. *Mr. Brown:* I do not see where the necessary source is of assuming large areas, or openings, as it were, in the tunnel, to be needed at all for the purpose of enabling you to get a fresh supply of air, because there is the air in front of the explosion all the time, partly exhausted, as the explosion goes on, by the explosion (partly exhausted of oxygen), but fresh oxygen being continuously renewed at. As this explosion revealed it would keep the column moving, and compress it.
19441. *Witness:* I think Mr. White is referring more particularly to Donald Stuart's theory. He has decided a great deal of time to explosives.
19442. *Mr. Brown:* That is probably another phase of what I suggest, but is it necessary to assume anything, for the purpose of putting this theory into practice, more than what we will call a mere gas barrel?
19443. *Mr. White:* Only this, your Honor, I understand that, in working out this theory, and drawing these deductions which he drew, Stuart based his conclusions on the fact that, in front of an explosion in a tunnel, as Chambers, and Trenchard, there was a series of series of explosions, showing evidence of great force, and deposits of coal dust, and in each of these series of explosions there was evidence of increased space, from that he drew his conclusion that the series of series of oxygen from these successive gases would lead to so series of fresh force to the explosion. They said in case that of a small fire explosion. What we propose to submit is that by the mere compression of air in a splinter you can get your blast, and you can get your critical dust, without an atom of further air or gas. The No. 1 Right hand is a dead end, and may be needed for the purpose of the argument as a splinter.
19444. *Q Do you believe in this theory or not?* A. I cannot follow Donald Stuart altogether, in fact I do not think, although he was regarded as a man with a good deal of knowledge on these subjects, many men were not able to follow him in his deductions where he attempted to draw as many as seventeen or eighteen separate and distinct explosions—at Chambers, I think it was.
19445. *Q Well, has any suggestion ever been offered with regard to these separate explosions at Chambers which you think is more probable than Stuart's?* A. Well, I can not risk to say just at the present moment, but there have been discussions in some of the laboratories, where some of the members did not agree with him, and were not able to follow him in his deductions.
19446. *Q I may take this, then, answering for the moment that theory of Stuart's to be from, then, as Mr. Robertson said, the only place where there is actually an opening for a fresh source of air to be cut through just outside of Murd's place?* A. Yes, the only opening.
19447. *Q So that, if his theory is correct, you would expect evidence of the use of a more intense explosion just there, would you not?* A. Yes.
19448. *Q You do not get that, do you; you have not got any evidence of that, have you?* A. No, there was no very great indication of force out in that zone.
19449. *Q Then again, you mentioned the rule of air that comes through from the 5th Right; well, if the rule was to have any effect at all, it would take effect at the 5th Right, would it not, in giving a fresh supply of oxygen?* A. No, I do not think so. I referred to the air which was travelling up the back heading. After the explosion reached the face of the back heading there would be a volume of fresh air in the back heading from the 5th Right.
19450. *Q Will you not admit then, that some of the air which came from the 4th Right went up the back heading to start with?* A. In the travelling road?
19451. *Q Yes, in the travelling road?* A. Yes, no doubt there would be a certain amount of force in that direction.
19452. *Q And the force in the main heading evidently broke into the back heading through all these cuttings, and through the door at the 5th Right?* A. Yes, the force was in the direction of the travelling road at the stoppage between the 5th Right and the 5th Right.
19453. *Q And, if the air was explosive at the 4th Left, there is no reason why it should not be explosive when it got to the point of the 5th Right?* A. No.
19454. *Q Then you would expect, if the fresh oxygen is to help it, that the effects would be shown at the 5th Right?* A. I think there were some effects in that vicinity.
19455. *Q What did you see there?* A. Between the 4th Left and the 5th Right the telephone wire and the cable were disturbed.
19456. *Q But the rule of air would not operate before the blast got to the 5th Right. You are talking of points early. The point where the rule of air could operate to add fresh oxygen would be at the 5th Right; would it not, if we will?* A. Yes, about the 5th Right.
19457. *Q At the 5th Right, where that wooden door, did you see any signs of greater intensity of force?* A. The intensity of force does not seem to vary much as between about the 5th Left and the 5th Right.
19458. *Q And the only actual force, actually off the mine No. 1 road near the 5th Right, was that door on the cut-through which was blown towards the 5th Right?* A. The only force off the No. 1 Main Right?
19459. *Q Once you leave the No. 1 Main Right?* A. Yes, the stoppage and the door in the main heading near the principal cut-through.
19460. *Q And they are much the same all the way along as far as indications of force go?* A. Yes.
19461. *Q What is your reason for saying that there was probably no in the face of No. 1 main heading, the back heading?* A. Gas was heard there four days after the explosion; it was evident that a certain quantity was coming.
19462. *Q Coming from where?* A. From the coal.
19463. *Q Where?* A. Near the face of the heading.
19464. *Q No. 1 heading?* A. The No. 1 heading, and I think it is possible that there may have been a small percentage of gas in the air when the explosion occurred.
19465. *Q Why not the air short instant, shortly after the explosion at all events, by the door at the 5th Right being opened?* A. Yes.
19466. *Q So that there was no current of air opening in the face of No. 1?* A. If there were any, there would be very little. The conditions would be altogether changed, of course.
19467. *Q Would it be fair to say that, that there was, practically, no current of air opening on the face of the No. 1 heading?* A. I think it would.
19468. *Q And you did not find that gas could flow right after?* A. No.
19469. *Q And, if the gas was coming, would not you expect it to accumulate there on the day after the explosion, and the day after that?* A. I should.

15500. Q You would not expect that there would be practically nothing for two days, and then an enormous quantity that days afterwards? A No, I should expect it to gradually accumulate.

15501. Q Well, $\frac{1}{2}$ per cent, I suppose, is practically appreciable? A Except in its efforts to make itself at sundry more sensitive to explosion.

15502. Q And you speak of thousands of cubic feet being found four days after—if it was being given off from the heat of No. 1 you would expect, probably, some thousands of feet, even two days after, would you not? A I think there would be, proportionally, a smaller quantity, in regard to the heat.

15503. Q How many thousands cubic feet did you say it is? A The area from the point where the explosion started was fixed, and assuming that the same amount was in the cut through and the back heading, would amount to about 12,000 cubic feet. Of course, I do not say that the whole of the 12,000 cubic feet was fire-damp.

15504. Q You say the actual contents of that space——? A Were about 12,000 cubic feet, and there would be a certain percentage, I think, all through that actual space.

15505. Q How far from the face did you say that you found these signs of explosive gas? A About 50 yards, I think it was.

15506. Q Then, if it was giving off gas, as you think possible, you would expect to find a great deal more than $\frac{1}{2}$ per cent at the very face, say, twelve hours after the explosion, would you not? A Yes, I would expect it more than that.

15507. Q And, under the conditions of damaged ventilation, supposing it was gas, would not that gas have come three hours from the lower parts of the mine, here there, even supposing it was fire-damp? A It could have, but I think it is improbable.

15508. Q Why? A That is the highest point, or one of the highest points in the mine, and I think it is the position where gas is more likely to be given off than places at a lower level, especially having regard to the fact that they are workings going into the virgin coal.

15509. Q Is there no fire-damp disturbed, do you think, during the process of an explosion, and from the dust? A Yes.

15510. Q And might not there be fire-damp, generated by the dusting of the coal dust, unmineral? A There might be, although I have never seen that theory advanced so far as I remember, when the damp has been found after an explosion.

15511. Q And does not the dusting of the dust produce also carbon monoxide? A Yes.

15512. Q And there was carbon monoxide in the pit, undoubtedly? A Doubtless, yes.

15513. Q Is different parts of the pit? A Yes.

15514. Q Is not carbon monoxide lighter than air? A Just about the same specific gravity, a little lighter.

15515. Q Is there any difference in the light of a safety lamp between carbon monoxide, and what you call fire-damp, that is between CO and CH₄? A Yes, it gives the same indications of a cap.

15516. Q And carbon monoxide, under certain conditions, is also explosive, is it not? A Yes.

15517. Q You say that this heading was going into the virgin coal, but the longer the heading stands, the more likely it is to show, is it not, even if there is gas? A Yes, that is so.

15518. Q And do not you think, this having been standing for eight months, that that period would give enough time for any gas in that neighborhood to show out? A Not altogether.

15519. Q Is this correct, that a volume of air came out of the 1th Right, and some went out, and some went under? A I heard probably with some fire-damp.

15520. Q Some of that went up the main rope road, you admit that? A Yes.

15521. Q Did some also go up the travelling road? A Yes, I think it is probable.

15522. Q And, would some of the air, mixed with fire-damp as you say, in the main rope road, be successfully working in to the travelling road as it streamed, through this stoppage? A Where there was any leakage, yes.

15523. Q At where it was blown down. Now, when the fans came up to that cut-through outside of Morris' place, how do you say it travelled then? A There was evidently a force straight up the No. 1 main level in the face.

15524. Q Straight up past Percell's cut straight? A Yes.

15525. Q And what else? A And there was evidently force which went along towards Percell's, and along towards that direction.

15526. Q And what about the back heading? A There was evidence of force in the back heading as well.

15527. Q Well, do you think the force came to the back heading from the back heading at the cut-through outside of Morris' place? A Well, I think part of it would come so there, and possibly part of it across the face.

15528. Q Through the back cut through in advance? A Yes, and the face cut through as well. It is really difficult, really impossible, to say how the force distributed itself.

15529. Q Take the back heading—were the forces from the cut-through just outside of Morris' place going towards the face, where? A There was evidence of an eddy force just on the edge side of the junction of Morris' place with the back heading, as shown by a small piece of canvas which was round the bottom of a prop. The canvas in Morris' place was disarranged, and had evidently been blown towards the north.

15530. Q That would be eddy, would it not? A That is eddy.

15531. Q What I want to know is this: Were all the forces in that locality going up? A I do not remember anything in an opposite direction.

15532. Q Then, if Morris was the man whose light ignited gas, the probability is that, at that time there was inflammable gas 50 yards from the face—would not that be so? A Well, it is not always a fair conclusion to assume that the position where men's bodies are found is the exact point where the ignition took place. As a matter of fact the bodies of the Miners were about 30 yards from the face.

15533. Q And do not all the witnesses you have heard suggest that they were going on at the time they fell, rather than going out? A Well, I did not see the bodies.

15534. Q But you heard the description of their being found with their heads facing inwards, and this can be easily called inward as prop, or rather roughly as it was, lying out for from there? A I have heard of that, but I forget just now the evidence with reference to the position of their bodies.

15535. Q Mr. Robinson? Q Do you know about that little? It might be so, well, Mr. Wade, to explain that to Mr. Robinson, if he does not know it.

10074. Mr. Wade.] Q. You did not see it? It has been described as a peep lying on the ground, and the weather being attended to, the bottle being caught on the tail of the peep, as it were, and the bottle having been going on that direction (before), and the peep having caught on the peep, which detained it? A. I saw

10075. Q. Was not Moore seen lying with his head on the back of his head, and his gaze in his hand? Would not that suggest that they were hurrying in that direction from their own place after the explosion? A. If they were found with their heads lying under I would take that as the best sign that they had been going asleep. I do not know that I can attach much importance to the fact of his having his head at the back of his head, or his gaze in his hand.

10076. Q. You would scarcely expect to have infamable get before the explosion 40 yards from the last?

A. No, I would not.

10077. Q. And if he had been infamable even 40 yards from the last, would not you expect it to have taken no time long before that? A. If there had been much fire-damp in the heading it should have exploded that.

10078. Q. I say, even taking 40 yards, that is half the distance from the last? A. Yes, I think it should have been 40 yards — (interrupted).

10079. Q. That you would have expected Pinwell to have let the gas up, or the cannot come in him long before? A. Yes, I think so.

10080. Mr. Robertson.] Q. In that case the fire-damp would overlap the out-throw in which the air current passed for Pinwell and the others as that side. If there had been much fire-damp in the heading it should have overlaid the out-throw through which the air passed for Pinwell and Atkins, and the other men on that side? A. I do not understand you.

10081. Q. If there had been over 40 yards of gas in the back heading it would overlap the out-throw through which the air passed for Pinwell and Atkins, and the other men on that side? A. That is all, with the exception of what would come through that current down on the main heading.

10082. That would be an unreasonable portion of the main current? A. Yes, it would.

10083. Q. Therefore those places, Pinwell's and Atkins's and the others, would have been filled with fire-damp from the back heading? A. Probably, yes.

10084. Q. But, is it not only possible, but certain, if the fresh air had to pass through fire-damp ever lapsing the rest through? A. Yes, it is certain, if the fire-damp was in any quantity.

10085. Q. But is it possible that fire-damp would overlap the out-throw with the whole of that air current passing through it? A. Not without being carried away by the air current.

10086. Q. The air current went, almost certainly, lower down the out-throw? A. Yes.

10087. Q. So that it is absolutely impossible that the fire-damp could have extended beyond the out-throw? A. At the time of the explosion.

10088. Q. You, it is absolutely impossible, unless on the assumption that Pinwell and Atkins, and the other men there were able to work with naked lights at that atmosphere? A. I think it is very impossible, but there would be a certain scale of air through that door, which would have the effect of further diluting anything which came round from the fire of the headings. In the conditions which you state I think it is probable that the air would be filled as being carried along in that place, even having regard to the scale of air which would pass through the narrow door.

10089. Q. Do not you think the two things are inconsistent, the presence of gas, and men working with naked lights on the other side of the gas with impunity? A. Yes, I do.

10090. Mr. Wade.] Which is the out-throw? A. — (Where passed in the out-throw on the plan.)

10091. Mr. Wade.] Mr. Wade, perhaps I have made a mistake as to the time of your own examination; but it seems to me that you were transcribing Mr. Atkins's own view on the assumption that Mr. Atkins was in favour of the theory that Moore's light was the light that caused the explosion.

10092. Mr. Wade.] No, not exactly. Evidence has been given here in Court by other witnesses that they are in favour of it.

10093. Mr. Bruce Greck.] Mr. Wade, I understood, in making Mr. Atkinson against the theory advanced by other people.

10094. Mr. Wade.] Quite true. There are three theories here. There is Moore's place, and the 4th Right under two conditions.

10095. Mr. Greck.] There are two theories as to the light that started the explosion, Moore's and Moore's; they are rather likely to be confused, owing to the similarity of the names, and then there is that theory, which is yours, that there was an explosion of gas at all, and that, therefore, lights are incriminated.

10096. Mr. Wade.] Yes, but I do not know what were the circumstances which they may take the view, if the evidence is not corrected, that the theory as to Moore's light was the correct one, and therefore I am saying to you not the facts.

10097. Mr. Wade.] Mr. Robertson.] You were speaking of the last out-throw, Mr. Robertson?

10098. Mr. Robertson.] Yes.

10099. Mr. Wade.] And Moore was found in the last out-throw but one.

10100. Mr. Robertson.] Yes.

10101. Mr. Wade.] Q. What was the distance that the end face of the back heading was in advance of the last out-throw? A. Twelve or 14 yards.

10102. Q. Presumably, now, from the line of out-throw opposite Moore's place to a point beyond Atkins's place, were not all the subdivisions of force there uniformly less the direction of the main No. 1 going towards Atkins's place? A. Yes.

10103. Q. And do you remember Atkins's own body—that was also found under of his working place? A. About 17 or 18 yards on the other side of his working place, at the top of a level.

10104. Q. There were, just alongside there, two skips, at the head of that level? A. Between their bodies and their working place.

10105. Q. Two skips turned on their sides, evidently forced from the No. 1 main heading in the direction of Atkins's place? A. Forced towards the men.

10106. Q. And did you notice some carrier wrapped round a peep at the corner of Pinwell's head? A. I do not know whether I noticed that, but I did notice a bar with a screw on it, he having the workmen up Pinwell's head—one peep was knocked out, and the bare end of the bar was forced some distance towards the west.

10107. 10085 39-3 Q 10108.

Flower—A. A. Atkinson, 21 February, 1903

16096 Q Do you remember seeing then a bit of canvas wrapped round the post just on the western side of the place where the canvas door had been? A I do not remember that.

16097 Q There was a number canvas door, or a number screen, in the cut-through, to turn the air up into Turt's head, the next head to Fawcett's, was not there? A I do not remember that; the tent was not so far up, and possibly might not require that, but I could not say that it was not there.

16098 Q With regard to the tent. Right, do you know how long that has been worked from the time it was first opened up? A The coal workings, or the pillar workings.

16099 Q The coal workings? A I do not know.

16100 Q For some number of years? A I think so.

16101 Q This first process would be to drive the headings, would it not, when you are opening up that area? A Yes.

16102 Q If there is gas, you generally find some gas in the headings when you are opening up a district, do you not? A You do, yes.

16103 Q Then, after these headings were driven, the ordinary practice is to drive the roads to extract the coal? A Yes.

16104 Q When that is being done the stails, if there is any gas, are being still further defined? A If the gas is allowed to fall.

16105 Q And by the extraction of the coal? A The extraction of the coal in the roads?

16106 Q Yes. A Yes, if the roof falls, it will effect an escape for gas in the stails.

16107 Q They work the pillars after they have driven a certain number of roads, do they not? A Yes.

16108 Q It is not the method adopted generally then, that the roof in the adjacent roads is allowed to fall, really to make the workings of the pillars safer? I never met the last part of the question. When they are working the pillars the general practice is to allow the roof of the roads to fall from time to time? A In many places they drive out the leaders in the roads, and some of the roof falls.

16109 Q And it generally falls, first of all, in a small fall, perhaps 3 or 5 feet in thickness? A Generally speaking.

16110 Q Then, after that, you get another fall, as a rule, do you not? A In the roads?

16111 Q In the roads—this is what I am speaking of at present? A Well, if you get up to a hard stratum it may stand for a long time.

16112 Q But mean or hard it comes down, is it not the whole point and purpose of endeavouring to let the roof fall and gradually become compact? A I cannot say that with regard to the workings of the roads. The intention is for that to take place after the whole of the coal is extracted, as in the long wall process of working.

16113 Q Well, what is the process in long wall, to let the roof slowly gradually settle down upon the gas below? A Yes.

16114 Q And you get a fairly solid compact mass? A Practically so.

16115 Q Whether it is done sooner or later, the same principle applies when you are working pillar and stall: the roof by degrees begins falling and falling until it is fairly wedged down upon the stuff that has fallen, and then makes it fairly compact? A Yes.

16116 Q So that, where you have a large area of pillar worked out of a district, you may have an enormous mass of roof over that area, where it has fallen? A It is very difficult to measure the shape which the roof takes where the roof will take.

16117 Q At a time when the roof falls it tends to assume the shape of a dome, rather than the shape of a square room like that? A Yes, that is the natural tendency.

16118 Q Now, these? Are not a lot of these things either absolutely well-known to everybody, or almost self-evident? For instance, that seems to be a proposition which is so self-evident that it is hardly worth while putting it to an expert. Nobody would suppose that the roof would come down in the form of a cube.

16119 A Yes. Well? Some people do say that. I have heard it again in a Court.

16120 Q The House? We want to get the inquiry through as quickly as possible, because I think the country is getting rather weary of this Commission, and therefore is going to hear.

16121 A Yes. Well? Of course I know there are reports on the Bench, but I do not know what class of evidence they want. I will be glad if the Court will step in if the Court think I am covering ground that is not required.

16122 Q Is not the fact this, that, as the falls take place, any gas there may be in that locality is continually drawing to a higher altitude? A Yes, that is the natural tendency.

16123 Q And the natural result too is that you get the surface falling in, and there is a natural chance for the gas to escape through the upper strata? A In some cases, yes.

16124 Q You would find it probably effected the falling in, the upper strata, will fall, a wedged roof would only be correct with reference to a small area? A Yes. Although you may have a weakness on the surface with a depth of 1,000 feet, I do not imagine that the working takes place through all that depth.

16125 Q You have had experience of working adjacent areas, that is to say some within 30 or 40 feet of one another vertically? A Yes.

16126 Q And you do not find that the strata are disturbed up to the point immediately overlying the one being worked? A If you were taking the pillars out in the lower area altogether you would find a disturbance in the upper area in a certain thickness.

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16044. Q. With regard to the current of air, the explosive mixture, that came from the 4th light, do you say that you think that would come from the inside? A. Yes, I understood you to say that the gas which came out of the 4th light had come from the inside. Q. Yes, having regard to the fact that I have not been able to hear of any gas having been found in that instant, I think it is possible that it came from the inside.
16045. Q. And it was observed, you mean, as I think by a fall of some of the roof? A. Yes.
16046. Q. But you do not expect, when the roof is falling, that you think will fall, and another side will fall immediately from the same place that that has come from, from the top of it, do you? I will put it this way: you were quoted a continuous fall of the roof; do not you mean by that that the exposed surface has broken off, and, although it has all come down together, it may have come at different intervals of time from different parts of the exposed roof, or do you mean that a stamp may come out at a particular part of the roof, and then another stamp may come out from the same locality that the first came from, and so successive stamps have the same fall? A. I think it was one continuous large fall, and it is really difficult, and almost impossible, to substantiate exactly how the stamp fell.
16047. Q. What I mean is this: that, when you have a fall which is, you say, continuous, you mean that the different portions of the roof break off at different times? Take the roof here; when you say that roof falls continuously, you mean that that corner would fall first, and another piece there next, and another piece there next, and so on, until finally the whole of the roof falls? A. Yes, I suppose it would certainly start towards the bottom first.
16048. Q. But would you expect, say, a piece falling from the middle of the roof, which let gas loose, another piece would fall from that same spot shortly afterwards? A. I could not say. I really do not pretend to be able to differentiate in that way.
16049. Q. If there was black-damp present in the 4th light, it would be present nearest the floor? A. Yes.
16050. Q. So that the very first fall would drive that black-damp out? A. It would disturb some of the black-damp.
16051. Q. If you have black-damp in conjunction with the volume of air in the main Mo. I would not that black-damp tend to make any gas present more inflammable? A. There is frequently a large percentage of black-damp associated with the stamp, and yet the stamp is not inflammable.
16052. Q. That may be, but does not the black-damp tend to make the fire-damp not inflammable? A. It tends to do so, but I might mention that Dr. Haldane says that, if you have 6 per cent. of fire-damp, the mixture is explosive if there is a third of the whole volume black-damp.
16053. A. Yes. Q. Black-damp would only check the explosibility by taking the place of oxygen—in an other way? A. Yes, I think that is the only way.
16054. Mr. Webb: That is all I suggest.
16055. Q. Now, when do you say in your explanation of the disturbance which took place outside of the 4th light? A. All the disturbances of doors are outside there.
16056. Q. What is the cause of that? A. The explosion from the gutter at the 4th light, or over the 4th light.
16057. Q. Do you mean that the explosion at the 4th light has thus travelled outside? A. Yes.
16058. Q. Do you see any signs of that between the 4th light and the 4th light? A. Well, there are no evidences—nothing to show evidence of force.
16059. Q. But you have got the ends of the rafters, showing what indications they do show—a force going out? A. That is the only thing.
16060. Mr. Johnson: Q. Did you not find the remains of a door from the 4th light, in hole? A. There was a small piece of surface found on the trips this, but I could not say that it was the door which came out of the 4th light.
16061. Q. I understood from the witnesses that there was no question of it belonging to the two doors? A. I was not able to fix it in that way.
16062. Mr. Webb: What door was that?
16063. Mr. Johnson: The remainder of the two doors at the 4th light. There was one opposite. One was found inside.
16064. Mr. Webb: And the other outside?
16065. Mr. Johnson: I do not know.
16066. Mr. Webb: What was Haldane's evidence?
16067. Mr. Johnson: As all events one of them was presumed to belong to the 4th light.
16068. Mr. Webb: Q. Do not you think that that shock at the 2nd left was blown down when the explosion outside first came out of the 4th light? A. I do not think so.
16069. Q. But you told us, I thought, before, that that force split when it came from the 4th light, this mixture split, and went partly inside and partly outside? A. Yes.
16070. Q. And you mean that the portions which went outside in the first instance produced no effect? A. Practically no effect.
16071. Q. Then, do you think it was going fast or slowly? A. Oh, I think it was going fast until it was reduced in speed somewhat by the air current which was coming in.
16072. Q. What pace do you think it would go?
16073. Mr. Webb: After all, Mr. Webb, it is hardly correct to talk of it as if it were travelling, it is one body of gas forced into the middle of another body, the air in the tunnel, and you must think of it as a body in itself, tending of course to spread out in both directions, impinging, first of all, by its momentum, against the ribs on the other side.
16074. Mr. Webb: And splitting.
16075. Mr. Johnson: Splitting is a word, not splitting in the sense of a solid, or even of a liquid; it is a different thing altogether—it is a gas, as it were.
16076. Mr. Webb: When would you say when gas like explosive mixture, which came out of the 4th light, travelled outside from the 4th light? A. I would not like to attempt to estimate that at all.
16077. Q. You cannot say fast or slow, or at what rate? A. I would not like to attempt to estimate that at all.
16078. Q. But, as far as the evidence goes, which you have seen, it only shows one force going outside from the 4th light, and one force going inside—in fact that all? A. Yes, there are no evidences of force outside between the 4th light and the 4th light, in fact as I have been able to find.
16079. Q. What little force there is, is inside? A. Yes, what little force there is is inside.

16093 Q With regard to those stores, that question from Atkinson's *Rehearsal* [note is not parallel with the case of the gas?]. A I think so.

16094 Q With regard to falls of stone, an important point is raised. When timber is blown out, and some stone falls at once, and during the explosion, and other stone falls some time after, and may continue falling for days, the stone falling at the time of explosion can be known by the fact of its being blackened with soot then filling the air. The place from which the stone fell can also be known by this blackening. Stone falling after the dust has subsided is, in the newly-exposed surface, clean, as also is the place from which it fell. Then, as a job after an explosion, we find stone with these characteristics as opposed dust:—
(1) Stone exposed before the explosion, and usually blackened with the remains of so-called soot of dust;
(2) Stone exposed during the explosion, and coated thickly with a fresh coating of dust; (3) Stone exposed after the explosion, and clean or spicily dust. You see then—the stone falling at the time of the explosion can be known by the fact of its being blackened with dust then filling the air? That is a case, certainly, as it is not of the dust which is caused by the explosion passing over the stone? A I think it refers to any fall which may take place.

16095 Q Yes, but it refers to a fall which happens to be in the line of the explosion and of the dust? A That refers to those sorts of falls.—[Interposed]

16096 Q "The stone falling at the time of explosion can be known by the fact of its being blackened with dust then filling the air." That refers to stone which have fallen in the line of the explosion? A Yes.

16097 Q "Stone falling after the dust has subsided is, in the newly exposed surface, clean, as also is the place from which it fell." That refers to the case where the cloud of dust has passed away? A Yes.

16098 Q But is not this a very different case? Assuming that there had been a fall of roof sufficient to drive the air and dust out of the air. Right, you would not expect to find dust on the stone that had fallen, would you in that case, would not it drive all the air and dust ahead of it? A Yes, I think so.

16099 Q And the greater the force with which it drives the air, the less chance of any dust settling on the stone after it fell, would not that be so? A Yes.

16100 Q So, so far as the appearance of the stone is concerned, that is consistent with a theory that the roof may have fallen heavily and have driven out suddenly the dust and the air? A Yes, I think that is consistent.

16101 Q And of course there may have been, possibly, some trifling quantity of dust, even afterwards, something very small? A Yes.

16102 Q Just a word in regard to the inspection of the face of No. 1, up to which point was the brattice, going along of Morris' place, in that look heading? A Well, there was no brattice (ridge of Morris' place) and the last cut-through in the look heading. [He points around the face as Mr. Wain says the place.]

16103 Q Was not that brattice up there somewhere in the look heading? A Yes, up towards the face from the last cut-through.

16104 Q From the last cut-through to the face of the look heading? A Yes.

16105 Q And that would have the effect of bringing the air down again through the cut-through to the first heading? A Yes.

16106 Q Was some part of that brattice which you have spoken of, damaged or broken? A It was damaged, and part of it was burnt, just about opposite the cut-through.

16107 Q Was the part that was burnt the part of it that was damaged? A No, I think that was not done.

16108 Q How was it done, this part that was damaged, was it all the ends at the top, or at the bottom only? A Towards the face, I think, it was, more particularly, damaged, off the inside.

16109 Q Do you mean off the inside at the top or when? A I would not say exactly. I made a note that the brattice was damaged at that point, but I would not like to commit to exactly how it was damaged.

16110 Q But did it seem to be the result of the force that caused that rupture? A I think it may have been so.

16111 Q Then there would be no obstacle to have any brattice between Morris' place and the innermost cut-through? A No.

16112 Q Do not you think, if anything had gone wrong with that brattice during those previous weeks, that the men working in Purcell's place would have detected the damage? A No, I do not see how he could do that.

16113 Q Then you mean that the brattice could have been damaged, and there would still be a proper current of air for Purcell to work on? A If the brattice was damaged beyond the last cut-through, if gas was going off there would be a tendency for it to accumulate, and if it accumulated to such an extent as to reach to the cut-through, it is probable that some of that gas would be carried around to where Purcell was working.

16114 Q And he would know of it then, there would probably be an explosion then? A Yes, if it was an inflammable mixture.

16115 Q With regard to the inspection of these water workings, of course we know that the regular inspection is only made once a month, but supposing that Morrison, up to the time the men were withdrawn from the old Right pit, examined these pillars when the men were working every night, and examined the edges of the water in the inspection booth, would not that be sufficient to detect gas if there was any? A Yes, if he made an inspection with the safety lamp at the highest parts.

16116 Q That is in the evidence, that he used to examine the pillars? A Presuming he did so he would have been able to find gas.

16117 Q If it was there? A If it was there.

16118 Q And, assuming he went on doing that until the men were withdrawn—which was eight days, was it not, before the accident? A Eight or nine days.

16119 Q Supposing you were the deputy, and supposing you had found no gas up to the time the men were withdrawn, and you had found the first fall of roof, would not you be notified to think that the place was safe?

16120 Q Yes, I would submit that this is not any expert opinion from Mr. Atkinson at all upon any scientific subject. It is a matter for the Commission.

16121 Q The Commissioner. It looks very much like your own recommendation put the other way up.

16122 Q Yes, I would submit that.

16123 Q Yes, I would submit that.

16124 Q Yes, I would submit that. It is a little towards the direction of a recommendation that Mr. Troughton suggests.

16112. *Mr. Wade* | Q. You were at the Dudley Mine after the explosion? A. Yes.
16113. Q. How soon after the explosion did you get there, how many hours? A. About ten hours.
16114. Q. Can you tell me what the location of the jet was like? A. It was warm when the air was not conducted.
16115. Q. Only warm? A. Yes, I would only describe it as warm.
16116. Q. Did you go down with Mr. McIlwain the first time, or had people been down before you got there? A. They had been down before I got there.
16117. Q. Did they have down and overrode the ventilation before you arrived? To some extent.
16118. Q. Do you know Mr. Joseph Dickinson, one of the Imperial Engineers? A. Yes.
16119. Q. Do you know if he has had down any theory about the compression of air producing trouble in coal mines? A. I do not remember exactly what his theory is, but he has some new theory with reference to the discharge of gas, although I do not remember exactly what it is without looking it up.
16120. Q. Is it a theory with reference to the discharge of gas? A. I think so.
16121. *Mr. Wade* | I have, your Honor, this report with regard to the explosion on the air resistor at Ryhope. Mr. Atkinson has kindly supplied me with this book, and I would like to hand it to the Commission, Volume 27, "North of England Institute of Mining Engineers' Transactions," page 157 to 215. (*See Exhibit No. 36.*)
16122. *Mr. Atkinson* | In this case of explosion suggested to be due in part generated by the compression of air?
16123. *Mr. Wade* | Yes. The facts shortly were these: that the cylinder was not designed, and a certain amount of dust appears to have been drawn into the cylinder, and also a certain amount of grease or oil, some kind of lubricant, which got inside the cylinder.
16124. *Mr. Atkinson* | The cylinder was used for what purpose?
16125. *Mr. Wade* | For compressing air. It may have been so the receiver after the explosion occurred.
16126. *Mr. Atkinson* | It was an experiment tried for the purpose of using compressed air as a motive power in the mine.
16127. *Mr. Wade* | It was not an experiment. It was used regularly in the working of the colliery.
16128. *Witness* | They took the air down pipe in the shaft about 1500 feet deep, and took it to small engines in different parts of the mine for doing haulage work. The air was compressed on the surface.
16129. Q. Do you know what the pressure was? A. 30 or 60 lbs.
16130. *Mr. Wade* | Do you see? (*Mr. Wade then read the following passage:*
- The explosion in the air compressor had a few seconds had it been running, two were stopped, as it had just finished when the air was coming in again. He had followed the air cylinder, and then over the top of the house, he was knocked down by the violence of an explosion. The third engine was running up when the explosion occurred, at 20.40 hrs., on March 14, 1935.
- The position of the shaft, which he had observed when following the air cylinder was 10 ft. per square inch. The compressor engine had been running at 1000 ft. per minute, so I had about three times the normal speed when the air cylinder was stopped, and the air was blowing at 10 ft. per minute. He further stated that he was standing underneath, having been struck on the head with some flying bit. As soon as he saw that he could not say how long he had been underneath, he found the engine running away and stopped it. He then observed that there was burning in the No. 1 air cylinder, like a furnace, owing to the heat of the flying bit.
- None of the attached photographs, such as two at the base of the explosion. They are stated to have readily indicated about 150 degrees Fahrenheit, although it was said that the temperature of the air immediately after the explosion was 100 Fahrenheit.
- He was not certain, when the pipe from the air cylinder was 10 inches diameter, they were fixed about completely closed, there nothing more to push in the hand.
- The diagram, based on the pipe and the No. 3 air cylinder was evidently a mixture of red dust and the lubricant mixed over from the air cylinder. It may therefore be said to consist of red dust, mixed oil, oil-spray, and water. (*Exhibit No. 36.*)
16131. *Mr. Atkinson* | There is something peculiar there, but I believe they got me up to a pressure of 3,000 lbs. for the purpose of working air engines.
16132. *Witness* | I think in cases they usually have it about 50 or 60 lbs., not more.
16133. *Mr. Atkinson* | But he has been compressed for practical purposes to 3,000 lb. per square inch.
16134. *Mr. Atkinson* | As you suggest, Mr. Wade, that the air pressure resulting from a disaster could possibly reach 80 lb. in the system (oil, or 1 lb. in the system)?
16135. *Mr. Wade* | Yes, they will be very rare. You can get a cylinder in an enclosed room, such as engine house, where there will be the case, and a thermometer, or you can get the same calculation, only roughly, of course, to show what the pressure was at which the air left the 6th Right, and, from the velocity, you can get the pressure in the limited area, and of course, the only accurate element in the calculation is, what was the piston stroke? That name, of course. If you get the two diameters falling in a solid piece you get something considerable, falling in a small passage like the 6th Right opening, as we have to allow for the probability of air not falling in one place.
16136. *Mr. Atkinson* | It is only a fall of two inches, a vertical fall of about 2 feet.
16137. *Mr. Wade* | I will ask Mr. Atkinson that question.
16138. Q. Did not you say that, when you mentioned it, there may have been a fall of the depth of 30 feet to the top of the roof?
16139. *Mr. Atkinson* | But that was not the fall of the roof. The roof did not fall 30 feet. It may have subsided. The piston stroke could not be 70 feet, it could only be 3 or 4 feet.
16140. *Mr. Wade* | Yes, but the weight coming down makes more difference in the force.
16141. *Mr. Atkinson* | But the piston stroke could not possibly be along 4 feet.
16142. *Mr. Wade* | Not 30 feet.
16143. *Mr. Atkinson* | It could not be more than 4 feet.
16144. *Mr. Atkinson* | The acceleration of a falling body depends entirely on the distance it falls, not upon its weight.
16145. *Mr. Atkinson* | And then the evidence is not that the whole fall was instantaneous.
16146. *Mr. Wade* | There is an evidence at all in it. It is not evidence.
16147. *Mr. Atkinson* | The theory is advanced.
16148. *Mr. Wade* | The Commission may be convinced that there is something in this particular theory, but it does not seem to be to be rather an unnecessary taking up of time to try to convince the Commission that such a thing could be in practice unless we have something like a witness that suddenly starts itself up with a map.

14146 Mr. Hook— Perhaps when your Honor loses the evidence your Honor may think differently. We have not got to that stage yet.

14149 Mr. Hook— There is one question I wanted to ask Mr. Adelson.

Examination by His Honor—

14150 Q If a pillar is left in a mine, or one or two pillars are left, all the surrounding pillars being removed, the pillar or pillars that are left would take a very much larger pressure than would normally be put on them? A Quite so.

14151 Q That must be so? A Yes.

14152 Q Is there any experience of the result on the coal of a pressure of that kind in relation to the generation of subsonic gas? A I do not know that there is.

14153 Q That is to say, is there any experience as to the effect of leaving pillars in the middle of gobs, in relation to the generation of gas, have you got any authorities, or have you got any knowledge on the subject? A I do not remember anything at the moment, but I will endeavor to see if I can find any ones in connection with it.

14154 Q Of course, you do not know of your own knowledge that there was a pillar left in this gob? A No, it has only been reported in evidence.

14155 Mr. Bruce Smith— I have a few questions to ask Mr. Adelson, in re-examination, but I do not propose to do so until I have gone through the remainder of his evidence.

14156 Mr. Bruce Smith— You wish to have an opportunity of looking at the notes?

14157 Mr. Adelson— I am in the same position.

14158 Mr. Bruce Smith— I propose Mr. Bates saw the Commission this morning?

14159 Mr. Bates— Mr. Bates does not seem to have any knowledge that would be of the slightest use. I quite agree with you, Mr. Bruce Smith, in the statement you have seconded us. We have seen him this morning, and we have all come to that conclusion, that there would be nothing gained at all by asking him.

Further cross-examination by Mr. Sprague—

14161 Q When you read Mount Kemble was one of the best equipped engineers, did you meet one of the best equipped in regard to the knowledge of the coal, only? A I think I met particularly with regard to the knowledge and the domain of the mine into districts.

14162 Q And not, I may take it, in regard to the safety appliances? A I would like to know to what safety appliances you refer.

14163 Mr. Sprague— Never mind, I will go into that in detail later on.

[At 12.15 the Commission adjourned until 2 p.m.]

APPENDIX.

(On resuming at 2 p.m. Mr. W. R. Post attended to take the formal notes of the evidence and proceedings.)

RICHARD HIND CAMERON was sworn, and examined as under—

Examination in chief by Mr. Bruce Smith—

14164 Q What is your name? A Richard Hind Cameron.

14165 Q What are you? A Chief Mining Surveyor, Mines Department, Sydney.

14166 Q You were deputed to go to Wollongong, in the Mount Kemble Mine, and make observations of the effects of the disaster with a view of preparing a report? A Yes.

14167 Q These plans are the result of your work? A Yes.

14168 Q Will you tell the Commission who actually drew them?—who did the pen and ink work? A The names of the draftsmen?

14169 Q Yes. A His name is William Martin. They were done under my supervision.

14170 Q I believe you have gone over the whole of them? A Yes.

14171 Q Over every detail? A Yes.

14172 Q Where then were? A Yes.

14173 Q Were the whole of the particulars as this plan (No. 37) were by yourself, and done the same thing apply to the other plans? A Yes, everything noted as what I saw. There are, however, reported positions of human bodies.

14174 Q Those positions are taken to be right. You get the information elsewhere? A The positions of the bodies are approximate.

14175 Q Regarding the human bodies, everything shown on the plans and evidence is information obtained by you personally, and checked by you personally, and afterwards committed to paper? A That is so with regard to every copy excepting the leaders.

14176 Q Is there more you have obtained above the slightest what it is? A In many cases I have.

14177 Q I thought that you had done to it most cases? A Well, with regard to the mine, they are not interfered by writing, because it was thought they could be seen.

14178 Q Many other things are interfered? A Yes.

14179 Q You have your note-books with you? A Yes.

14180 Q From which the plans were made? A Yes.

14181 Q And you could refer to your note-book showing your original notes? A Yes, I could. These plans were intended confidentially before your Honor, and I believe these are absolutely [The plans are the same as those previously marked 26, 27, 28, and 29 Exhibits].

Cross-examined by Mr. Wade—

14182 Q There is one thing which I should like to ask you about, in the 4th left. I want to ask you about the telephone wires that was found round a job. Was that cut off the 4th left? A It originally went outside.

14183 Q There were a number of telephones between the 4th left and the tunneling road. By the dotted lines on this plan [Exhibit No. 37] show the wires? A The dotted lines show the wires.

14184 Q Between the end of the wire attached to the job and the next place of wire there is a gap? A Yes.

14185.

16155. Q. There is some wire blown into a net through—250 yards? A. Yes. But I do not think it is the same wire as was blown into the tub. I think the signal wire driven into the outderrick, at 250 yards, is the same as is shown ending in the net through on the outside side of the tub. Right, and opposite the 4th Left travelling rail.

16156. Q. There would be a distance between the end of the signal wire in the net through, at 250 yards, and the other portion of it opposite the 4th Left travelling rail, at 41 yards? A. Yes.

16157. Q. Did that distance of 41 yards mean? A. There are two wires broken into four pieces. The wire attached in the tub between the tub Left rope end and the 4th Left travelling rail is broken off the wire at 250 yards, the bearings being taken from a point near the 3rd Left.

16158. W. Winer? A. Are those two smaller pieces of the wire kind of wire? A. I think they are the same kind of wire.

16159. Q. It is not by the nature of the wire that you can identify the pieces? A. No, by the lengths.

16160. Q. Is it twisted wire? A. I think it is ordinary telegraph wire.

16161. Q. Is it not twisted or twisted? A. No, there is nothing round it.

16162. Q. All the wire that you have spoken of seems to have gone large of where it was broken? A. Undoubtedly.

16163. Q. You have spoken of a piece of wire which was driven a foot into a ship, and the end of the ship into which the wire was driven was outside. Can you form any opinion as to whether that wire was driven from outside into the ship, or whether the ship was driven on to the wire? A. I think the ship was driven on to the wire.

16164. Q. How do you account for the fact that the end into which the wire was driven is shown as being outside. That would indicate in ordinary wire looks at the place that of the ship had gone out to the wire, it must have gone outside, did it? A. In my opinion, it came inside.

16165. Q. What you explain to the Commission what led you to that belief when you discovered the ship, among that the ship was not firing the duration it was in originally? A. I came to the conclusion from this fact. I followed the wire from the tub into which it was driven, and I might say that at this stage I had no knowledge which way it was driven. I believed it with my finger, under Oliver and over timber and set myself to go further along, and eventually to a point where it was fixed in, in another, just beyond a bare end is shown on the plan. The point is marked C on the plan. The wire was fast to the structure, and eventually it had gone from that distance from where the wire was fast to the structure to where it was driven into the tub.

16166. W. Winer Smith? Q. The distance on the ground or of the wire? A. I mean the distance where the wire was stretched straight.

16167. Q. You mean the length of the wire? A. No, I do not mean that, the direct line between the two points was 72 feet, but the amount of wire which was twisted amounted to 243 feet.

16168. Q. What do you conclude from that? A. I conclude from that that the difference, which would be 70 feet, could only come from one direction, and that is action. Therefore, that particular tub must have struck the wire when it was travelling along, because the wire was between the tub and where it was fixed in, and it would break before the tub. That proves that the tub was travelling along, and that after it struck the wire it travelled along 70 feet before it reached the position to which I found it, and it probably turned over, from the fact that it is now pointing out. The wire was found tightly round it.

16169. Q. I think you said the ship was a sailing ship? A. Yes, it was actually said.

16170. W. Winer Smith? Q. What do you mean by pointing out? A. I mean that the end of the tub into which the wire was driven was pointing outwards.

16171. W. Winer Smith? Q. Do you mean that the ship struck the wire, and afterwards turned round a couple of times? A. Yes.

16172. W. Winer? Q. When you say that the wire was driven into the ship, do you mean that it was suddenly driven into it—was the ship perforated by the wire? A. The ship was cracked for about a foot, and the wire was lodged firmly in the ship.

16173. Q. Is the ship wood or iron? A. It is a wooden ship.

16174. Q. I mean where the wire was driven into it? A. There was a split in the wood at the place.

16175. W. Winer Smith? Q. Was it a natural division or was it made by the wire? A. The wood was already split. I could not say whether the split was made by the wire or whether the tub had been split against the side of the ribs of the mast.

16176. W. Winer Smith? Q. How was the wire looked up? A. I mean that it was looked in the wood of the ship, going that way and that way, all about the ship.

16177. W. Winer? Q. There was not a division between two barrels? A. No, it was a split in the wood.

16178. W. Winer Smith? Q. Are you able to say where that wire was placed before the explosion—was it on the mast, or on the ribs, or on the floor? A. It was on the side near the mast.

16179. Q. At a higher point than the top of the ship? A. It would be on an average twenty feet above the floor.

16180. Q. How could the ship pick up the wire on the mast, and then it drove it down? A. From the fact that I saw things there in all directions I am not at all surprised that the ship was blown high enough to break the wire.

16181. W. Winer Smith? Q. The ship was "sailing" down the breaking? A. Yes.

16182. W. Winer Smith? Q. And it may have struck the wire? A. Yes, and brought it down.

16183. W. Winer Smith? Q. Was any portion of that wire fixed to the prop? A. Yes.

16184. Q. I mean about here? Q. I cannot say because the prop was gone.

16185. Q. It seems not a prop was a rail through there with a wire attached to it? A. That is not a prop, the wire was caught on the edge of a rib—on the upper rail.

16186. Q. If the mast was attached to the prop and the ship bumped against the prop, it would be easy to see how it would get caught in the wire? A. I believe from the amount of distance there is nothing to make one wonder how the ship would reach the wire.

16187. W. Winer Smith? Q. Are there any other things which do not explain themselves on this plan? A. There is the other wire.

16188. Q. It is shown on the plan? A. Yes. It proves also that it was dragged along.

16189. Q. Dragged in, or forced in? A. It has been brought along. The proof is not so conclusive as in the first case.

- 14215 *Mr. Moore*. Q Your theory is not that the wire was blown off, but that something which was flying along at the time of the explosion cut it? A Yes. Several things were flying along the heading and some of them may have cut the wire.
- 14216 *Mr. Thib*. Q Have you got a technical plan of the roadway between the 4th Right? A Yes.
- 14217 Q Did you see some rollers in that road, on the right side? A Yes.
- 14218 Q Was any rubbish heaped up against them? A No, the rollers were washed away from the frames.
- 14219 *Mr. Moore*. Q Is there not an unconformable heap of coal there? A Yes.
- 14220 Q Did you know any hypothesis as to how that coal got there? A I searched for a day or a large area, but I could form no opinion at all, except that I assume that it came out of some hole.
- 14221 Q Were you any idea what became of the hole? A I have no idea.
- 14222 *Mr. Bruce Smith*. Q Did you find any empty tubs? A No, except some between the 4th Left rope road and the travelling road. That place is 250 yards off, and there were, between those points, four full tubs open.
- 14223 Q One of them which you arrived at, from that part of No. 1 heading, opposite the 4th Right up to the 5th Right, everything was travelling idly, and all the signs of force were idly? A All the evidence I got between the 4th and 5th Right was that the force travelled idly.
- 14224 *Mr. Moore*. Q There was a dead point, I presume, and then from that dead point, going south, the force showed signs of travelling idly? A Yes.
- 14225 Q Where would you put the centre of that dead point? A Anywhere near the 4th Right. I have to assume something, I have to assume that some force I found came out of the 4th Right. I assume that because there is not evidence in the west road, and there is no evidence and signs of the 4th Right.
- 14226 *Mr. Moore*. Q That would show that the dead point would be just at the end of the 4th Right? A That is what I know, provided the centre came out of the 4th Right, and was not on the west road.
- 14227 *Mr. Bruce Smith*. Q You have shown on the title of the 4th Right an accumulation of coal and, indicating a sweep of wind round the corner like a wave? A Yes.
- 14228 *Mr. Moore*. Q There is a great mass of coal that has fallen just at the opening of the 4th Right. Did you notice the existence of that? About what was the thickness of it? A Well, the open place it left would show that it is a little over 2 feet. There is the section here which shows it, about 2 feet of that has fallen out.
- 14229 Q Was the place at the top black, or was it white? A I do not remember.
- 14230 Q It appears then, unless something has been removed, as though most of the stone was cut off from where it fell. Is it directly under the place it fell down? A Most of the stone appears to be cut off, there is not fairly large stone which is idly.
- 14231 Q There is nothing to show at what exact stage of the proceedings the stone fell? A Nothing that I could see. I could only say that it was there.
- 14232 *Mr. Bruce Smith*. Q I suppose your notes books show nothing more than is shown on the plan? A Nothing more than is shown on the plan.
- 14233 I may say, your Honor, that there are all the witnesses that I intend to call. I intended to call two Managers, one of whom was with Mr. Atkinson at the time, but I do not intend to do so. I should, however, like to ask Mr. Atkinson some questions on re-examination. The Commission has concluded to set the right of putting him in the box again, if there is anything said by the Managers which requires something. I have also to deal with Mr. Atkinson's recommendations finally after he has heard what the Managers have to say. The few questions which I have to ask him on re-examination will serve my purpose there.
- 14234 *Mr. Moore*. Q And that he hoped that in the future the Commission would be able to proceed with a little more despatch than it had in the past.

[The Commission at 2.15 p.m. adjourned until 11 o'clock on the following Monday.]

MONDAY, 16 FEBRUARY, 1903.

[The Commission met at the Lord Appeal Court, Birmingham.]

PRESENT:—

C. E. R. MURRAY, Esq., D.C.J. (PRESIDENT).

D. A. W. ROBERTSON, Esq., COMMISSIONER. D. RITCHIE, Esq., COMMISSIONER.

Mr. Bruce Smith, Barrister at Law, instructed by Mr. Wain, Crown Solicitor's Office, appeared on behalf of the Crown.

Mr. A. A. Lynght, Solicitor, appeared on behalf of—

- (a) the representatives of deceased miners, whether as (victims of the explosion),
- (b) the employers of the Mount Krishna Colliery (present, whether, &c.), and
- (c) the Shrewsbury Colliery Employees' Association (The Southern Mines' Union).

Mr. G. J. Barry, Solicitor, appeared on behalf of the Mount Krishna Coal and Ore Company (Proprietors of the Mount Krishna Mine).

(Mr. J. Gerbik, Secretary to the Commission, was present to take shorthand notes of the evidence and proceedings.)

Mr. J. A. ATKINSON, previously sworn, was further examined as under:—

Re-examination by Mr. Bruce Smith. —

14241 Q First, I would like you to tell me about the hydrogen lamp—it was returned to as having been used in some of the mines, and not in others? A Yes.

14242 Q I want to ask you whether the hydrogen lamp was used for the purpose of official inspection in Great Britain? A No.

14243 Q Or in any other country that you know of? A No.

14244.